















TWENTIETH ANNUAL REPORT

OF THE

RAILROAD AND WAREHOUSE COMMISSION

OF ILLINOIS.

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RAILROADS, FOR THE YEAR ENDING JUNE 30, 1890.  
GRAIN INSPECTION, OCTOBER 31, 1890.  
OFFICE, DECEMBER 1, 1890.

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COMMISSIONERS:

JOHN R. WHEELER, CHICAGO, *Chairman*.  
ISAAC N. PHILLIPS, BLOOMINGTON. W. L. CRIM, FRANKFORT.  
J. H. PADDOCK, SPRINGFIELD, *Secretary*.

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STATE OF ILLINOIS,  
RAILROAD AND WAREHOUSE COMMISSION,  
SPRINGFIELD, December 1, 1890.

*To His Excellency, HON. JOS. W. FIFER, Governor of Illinois:*

In this, the twentieth annual report of the Railroad and Warehouse Commission of Illinois, for the year 1890, we shall attempt to confine our discussions to those topics which we deem of practical importance arising in the field covered by our duties. We are glad to be able to open this report with a reiteration in substance of what we said one year ago, namely: That there is a continued tendency toward better equipment of railroads, improved road-beds, and safer structures, and, generally, toward a condition of greater safety, convenience and comfort for the traveling public, as well as one of greater speed and efficiency in transportation of freights. Much remains to do, no doubt, to bring the railroad service of the State to a condition of ideal perfection. Some of our roads, indeed, can never, under independent management, perhaps under any management to which they are likely to pass, take rank as perfectly safe highways, nor offer to the public more than second or third-class accommodations. Yet these weaker roads, with all their defects, perform important functions for the public; and none of them could be dispensed with without serious inconvenience to their patrons. When a road is once built, even though not justified as an investment for capital, and doomed to go from the hands of one receiver to those of another, people along the line, none the less learn to depend upon it; and the whole industrial and social economy of large neighborhoods of people is at once adapted to the great fact of rail transportation, imperfect though it be.

It is this state of dependence upon rail highways, into which communities of people so inevitably fall, which renders a judicious regulation of railways by law so necessary to the public welfare. If the people become dependent even upon the weakest road which happens to penetrate to their neighborhood, how much more is this so in the case of the better and stronger roads. Of these stronger roads this State has a large mileage; and of

the better class of Illinois roads it may be said, without boasting, that in equipment, structures, and management they do not suffer in comparison with the very best in the United States.

#### PHYSICAL INSPECTION OF ROADS.

The Commissioners, accompanied by Secretary James H. Paddock and Consulting Engineer Chas. Hansel, have inspected the following railroads: Cairo, Vincennes & Chicago ("Big Four Route"); Chicago and Ohio River; Chicago, Santa Fe and California; Grand Tower and Carbondale; Illinois Central; Indiana and Illinois Southern; Jacksonville Southeastern; Mobile and Ohio; Peoria, Decatur and Evansville; Peoria and Pekin Union; St. Louis, Alton and Springfield; St. Louis, Alton and Terre Haute; Toledo, Peoria and Western; Terre Haute and Indianapolis (Vandalia); Terre Haute and Peoria; Wabash, and Wabash, Chester and Western.

#### CAIRO, VINCENNES AND CHICAGO.

This road extends from Tilton southwardly through the eastern portion of the State to Cairo, and was formerly a part of the Wabash, St. Louis and Pacific Railway. During the Wabash management the property was permitted to deteriorate until its physical condition was very bad. Shortly before our inspection was made the management of this line had been transferred to the "Big Four". About one hundred miles of the road is laid with sixty-pound steel rail. We found a considerable force employed in reconstructing bridges and road-bed, which, if continued, would greatly improve the road. We found the two trestle bridges south of Tunnel Hill in bad condition. As these bridges are very high, being from sixty-five to ninety-four feet from creek bed, special examination was made. The examination revealed faulty construction and decayed timber, and a general condition so bad that it was deemed necessary to order new bridges in their place. The management was requested to renew these bridges as soon as possible; and though we have not been officially notified of the fact, we learn through outside sources that the bridges have been replaced. At Carmi station a portion of the main track is used jointly with the Louisville and Nashville Railway, the south switch turning out of main track being a short distance from depot where all trains stop. The north junction, however, is about fifteen hundred feet from station. As operated at that time it presented a constant element of danger from collisions, as the trains of both roads approach the junction under full headway, expecting to find clear track. To protect this point we ordered both companies to join in the construction and operation of a high semaphore signal.

## CHICAGO AND OHIO RIVER.

This road extends from a junction with the Chicago and Eastern Illinois, at Sidell, to Olney, eighty-six miles south. The original gauge of this track was three feet, which has since been changed to standard gauge. The rails are iron and very light, ranging from thirty to fifty pounds. But thirty-seven men were engaged in maintenance of way, a force inadequate to keep the work in good condition. The schedule time for trains is, however, very slow and no accidents have occurred. For the year ending June 30, 1889, the books of this company showed a net deficit of \$689.89, with no interest paid on bonds. There seems to be no immediate prospect of improvement in this road and it continues to furnish reasonable accommodations for such business as is offered.

## CHICAGO, SANTA FE AND CALIFORNIA.

This line extends in Illinois from Chicago to the Mississippi at Ft. Madison, two hundred and thirty-five and one-half miles, with a branch from Ancona to Pekin, fifty-seven and nine-tenths miles, including track of Toledo, Peoria and Western Ry. from Eureka to Pekin Junction, five and one-half miles. The line from Chicago to Pekin was formerly operated under the title of the C., P. and S. W. Ry., and is laid with steel weighing seventy-one pounds per yard. The rail from Ancona is new. There are three hundred and thirty-five bridges between Chicago and Ft. Madison, and seventy-four between Ancona and Pekin. The most important structure spans the Illinois river one hundred and thirty-one and one-half miles from Chicago. The principal structure over the river proper consists of one draw four hundred and fifty nine and three-tenths feet long, and three fixed spans one hundred and fifty-three feet each. The east approach is of pile and trestle bents, of sixteen-feet span, five thousand, five hundred and ninety-two feet in length. The west approach is composed of three pile and two hundred and thirty-five trestle bents three thousand, eight hundred and three feet long. Total length of bridge, ten thousand, one hundred and sixty-four and three-tenths feet. The entire structure seems to be in good repair and extra precautions are provided for the guidance of enginemen approaching draw by a system of home and distant signals operated by bridge-tender. Considerable improvement is being made in the condition of the track, the regular track force being one man per mile, which force is increased by temporary extra gangs.

## GRAND TOWER AND CARBONDALE.

This line extends twenty-six and two-tenths miles from Carbondale to Grand Tower. The business of this road is principally in coal. The line is laid with fifty-six pound steel rails,



the oldest being seven years in service. There are but few bridges on this line and the physical condition is in keeping with the traffic.

#### ILLINOIS CENTRAL.

This line shows marked improvement, and with the new steel which is being laid and other general betterments, the addition of new motive power and coaches, bids fair to make this road one of the finest in the State.

#### INDIANA AND ILLINOIS SOUTHERN.

This line extends from Effingham east, crossing the Wabash river at Riverdale, fifty-three miles. The original gauge was three feet, and was changed in 1887 to standard gauge. The original rails are still in service and are very light, being but thirty-five pounds per yard, and are now very much worn. Many of the short narrow gauge ties remain in track. The joints are partly bolted and ties are not full spiked, and the general condition is very bad. The only important bridge spans the Embarrass river. This bridge is a new through iron truss.

#### JACKSONVILLE SOUTHEASTERN.

The title of the company operating this line is the Chicago, Peoria and St. Louis. The main line, first operated as the J. S. E. Line, extended from Jacksonville to Centralia. This line has been extended to Drivers under the title of Louisville and St. Louis. The Litchfield, Carrollton and Western, extending from Barnett to Columbiana, was added to the J. S. E. system. The line of the P., P. & J., extending from Pekin to Jacksonville, and the S. & N. W., extending from Havana to Springfield, were purchased of the Wabash and added to the J. S. E. system. The J. S. E. line is also operating the St. Louis and Chicago Railroad, from Springfield to Mt. Olive, and have extended the line to East St. Louis. As will be observed, the system known as the J. S. E. Line is made up of a number of dependent roads; and while its corporate name is not the J. S. E., for commercial reasons it chooses to operate under that title. Only a portion of this road has been inspected, being that part extending from Pekin via Springfield to St. Louis. Considerable new steel has been laid between Havana and Pekin, and some renewals in rails have been made between Havana and Springfield. Since the leasing of the St. Louis and Chicago line, the section force has been increased and considerable improvement has been made. This line is now finished to East St. Louis and the Santa Fe trains are running from Chicago to St. Louis via Pekin, using this line from Pekin.



## MOBILE AND OHIO.

This line extends from Cairo to East St. Louis, distance one hundred and fifty-two miles. As originally constructed it was intended for a narrow gauge, and as all laws of gravity seemed to have been suspended when narrow gauge roads were built, the present grades and alignment present a great hindrance to operation. The gauge was changed to standard gauge in 1886, and new steel, weighing sixty pounds per yard, was laid. Considerable work was performed previous to our first inspection during September, 1889, but owing to continuous mild weather, with heavy rain during the following winter, the road bed was considerably damaged and it was necessary to maintain temporary surface by shimming. A second inspection was made during August of this year, when we found a large force of men at work shouldering embankments for ballast, ditching and filling. A force with steam shovel were engaged in cleaning out cuts and filling in openings where renewals of bridges were necessary. The entire line was busy with general improvement, which bids fair to place it in better condition than ever, before the winter closes down work.

## PEORIA, DECATUR AND EVANSVILLE.

This line extends from Pekin to Grayville, on Wabash river, two hundred and three and six-tenths miles. When inspected the rail was fifty-six pound steel, and twenty-six miles old iron. The track force is not sufficient to maintain the track properly, and more cross ties should be put in. We have advised the management that these renewals must be made and the general physical condition of the road improved.

## PEORIA AND PEKIN UNION.

This road is used for a terminal and switching road at Peoria with a line extending to Pekin. The general condition of the road is good. The bridge crossing the Illinois river at Lower Peoria has been the subject of special examination and report. On Feb. 3, 1890, an accident occurred there of so serious a nature that it was deemed advisable to send Mr. Chas. Hansel, Consulting Engineer, to make a special examination and report. It was found that the Superintendent of the P. & P. U. Ry. had employed an expert from the Detroit Bridge Co. to make examination of the bridge, in December of 1889, with the view of learning if the bridge was sufficient to maintain the increased traffic. No written report had been made up to the time of the accident, but no defect was reported to your Commission or the railway company. On the evening of February 3, a train of the "Big Four" (which company uses this bridge), composed of coal and grain cars, and pulled by an engine of the consolidated type, pulled out from the junction, and receiving ad-

vance signal moved onto the bridge. The engine had reached the first pier when the shore span fell from under the tender, pulling the engine back and precipitating it to the river bottom. The head brakeman and fireman were caught between tender and boiler and instantly killed. The engineer was held by the legs with his head above water, and although great effort was made to release him, he died in that position. The shore end of the span remained on the abutment. The engine standing with her rear drivers on the bottom of the river and the front trucks resting against the pier near the coping, thus standing nearly vertical with the tender at right angles to axis of engine. As the lower chord at point of fracture was buried under the wreck it was impossible to determine the cause of failure. The fractures presented to inspection showed clean and new. The main structure is made up of four fixed spans of one hundred and fifty feet each, one span of one hundred and twenty-five feet and a draw of three hundred feet. The fixed spans are of the type known as "Post's Patent Diagonal Truss", a combination of wood, iron and steel. The span which failed was the shortest. It was reconstructed in January, 1881, by Rust and Coolidge, bridge builders of Chicago, to a calculated moving load of three thousand pounds per lineal foot. Compression members (top chords and struts) and track stringers are of white pine; tensil members (bottom chords, suspension bars and counter bars), lateral rods, floor beams and hangers of iron; pins of steel, and top chord housed with corrugated iron. Mr. Hansel reported that the timber showed sound, but the iron and steel presented a low grade of metal and recommended that the different members be subjected to test by machine and analysis to determine upon the condition of the remaining structure. Samples were sent to the Pittsburgh Testing Laboratory and showed as follows: Carbon, 0.270%; manganese, 0.530%; phosphorus, 0.165%; sulphur, 0.128%, and silicon, 0.055%. Phosphorus makes steel brittle and hard, and the same is true to a less degree with silicon. Modern specifications for steel to be used in such work would be phosphorus, .07 to .08%; sulphur, .03 to .04%, and silicon, less than .02%. By comparison with the results obtained it will be seen that the ratio was greater in the specimen tested. In the testing machine the steel fell below the general requirements in elongation, reduction of area and character of fracture, showing a remarkably poor piece of steel. The iron was defective in tensil strength and in bending cold. Iron subject to tensil strain should be tough, ductile, of uniform texture and capable of bearing or sustaining not less than fifty thousand pounds per square inch of sectional area. When tested in large and long lengths it should have an elastic limit of not less than twenty-six thousand pounds per square inch. The reduction of breaking area should average .25% of the original area, and the elongation of the bar before rupture should be at least .15%; and when cold, a round bar one and one-half inches in diameter

must bend through one hundred and eighty degrees without fracture. The specimens fell far below the standard, and a copy of Mr. Hansel's report was furnished the management of the P. & P. U. Co. with instructions to make such renewals as Mr. Hansel deemed necessary, and that in operating, no greater moving load will be allowed than will strain to exceed two thousand pounds per foot on any span; and that all trains must be held to a speed not to exceed six miles per hour. General Superintendent M. S. Connors, advises by letter that a bridge is being built at King Bridge Company's works, and that it is hoped to have it in place soon.

#### ST. LOUIS, ALTON AND SPRINGFIELD.

This line was formerly operated by the Wabash, and extended from Bates to Grafton. After the sale to the St. Louis, Alton and Springfield Company, a branch line was built from Newbern to Alton, thirteen and four-tenths miles. Between Newbern and Elsah the line was temporarily built over the hill, necessitating heavy grades, curvature and extensive bridging. The completed line contemplated a tunnel, which was commenced and abandoned after considerable work had been done. The building of this line required many high and extensive bridges, and at the time the road was taken from the Wabash management the physical condition was poor, and little had been done to renew the structures and roadbed. Complaint was made that some of the bridges were dangerous for traffic. Mr. Chas. Hansel was ordered to make a thorough examination of the entire line, and make special report on each bridge. This examination was made by him. The general officers accompanied him, and a stop was made at each bridge, where the timber was carefully examined by boring and prodding. Mr. Hansel's report, which is on file in this office, describes in detail each bridge, and the kind and number of members necessary to renew in order that the bridges might be safe for traffic. We find from his report that there are one hundred and nine bridges on this line, having a total length of fifteen thousand one hundred and sixty-two feet. The repairs indicated as necessary on bridges between Newbern and Elsah would involve a considerable expense, and the company was given the choice of making such repairs or abandoning the track. They chose to abandon the track, which was taken up between Jan. 1, 1890, and Sept. 16, 1890. This removal abandoned four thousand two hundred and eighty-one lineal feet of dangerous bridging, and is generally satisfactory. In order to connect with Elsah and Grafton, it was necessary to build from Piasa, on the Alton branch, up the river to Elsah, distant five miles. This line is now completed. The Alton branch is laid with fifty-six pound steel, the original line being iron of same weight. The road needs sixty thousand cross ties and general repairs. The report made by Mr. Hansel was sent the management, with instructions to comply with recommendations contained therein. The road is now in the hands of a receiver, who

is authorized to issue \$300,000 in receiver's certificates. This money is intended for the rebuilding of the road and relaying fifty-one miles with sixty pound steel. Considerable improvement has been made in this line, yet much remains to be done.

#### ST. LOUIS, ALTON AND TERRE HAUTE.

This line extends from East St. Louis to Eldorado, with branch from Pinckneyville to Pellonia, opposite Paducah, and from Belleville to East Carondelet. The line is laid with sixty pound Edgar Thompson steel. There are no bridges of importance. The maximum grade is seventy-eight feet per mile. Considerable improvement has been made on this line during the past season.

#### TOLEDO, PEORIA & WESTERN.

This line extends from Hamilton and Warsaw to State Line, with branch from LaHarpe to Iowa Junction. When this road was taken from the Wabash system the physical condition was poor. Soon after the new company commenced operating the road the Chatsworth wreck occurred. This was a severe blow to the new company. A meeting of the directors was held at once, when it was determined to advance funds to meet the payment of claims amounting to over \$300,000. As there were no funds in the treasury, this advance was made by the directors, which was highly creditable to them. Since that time the road has been making steady improvements, filling in trestles and renewing bridges. The combination draw bridge crossing the Illinois river at Peoria was replaced this season by a new bridge of iron and steel. This bridge consists of two through fixed spans, one hundred and forty eight feet and eight and one-half inches from center to center of end pins, and one draw two hundred and eighty five feet and six inches from center to center of end pins. The old piers were fitted with new seats, and the entire structure is now first-class. This bridge cost \$48,605.30, and was opened for traffic November 9, 1890. A new bridge for Spoon River is now building, which will cost \$9,000. These two streams are the only important ones crossed by this line. These improvements were carried on, notwithstanding the books of the company showed a net deficit of \$16,883.99 for year ending June 30, 1889.

#### VANDALIA LINE.

This road extends from East St. Louis to Terre Haute; line in Illinois, one hundred and fifty-eight and three-tenths miles. The track is ballasted throughout, forty-two miles of rock ballast on west end, the rest gravel. From East St. Louis east twenty-two miles the rail is seventy-pound steel. All main track turnouts have point switches and spring frogs, and the entire line is full bolted and spiked. All necessary highway signs, whistling posts, mile posts,



cattle guards and cross and line fences are in place. Cross fences are whitewashed and switch stands clean and well kept. Fifteen hundred feet of wooden bridges have been replaced by earth with stone culverts.

The business is nearly all through. The heavy power and long trains necessitate close attention to maintenance of way, and the fact that no person was injured by derailment or collision during the year ending June 30, 1889, is evidence of careful and intelligent supervision. The road is in every way first-class.

#### WABASH.

That portion of this road which extends from Effingham to Bement, and from Bement to Springfield was inspected. The track from Decatur to Bement is an example of the most finished work on this road. All the traffic to Toledo and Chicago from St. Louis, Keokuk, Quincy, Hannibal and intermediate stations passes over this twenty miles of track. It is well tied and ballasted and laid with heavy steel. All traffic is operated under the absolute station block system. All switches and frogs are of the most approved pattern, and the track is first-class throughout. The line from Bement to Effingham, sixty-two miles, has been greatly improved and is sufficient for the traffic. The line from Decatur to Springfield is an example of track which, while not equal to the best portions of the road, is much better than the branch lines, and bids fair to equal the best.

#### WABASH, CHESTER AND WESTERN.

This road extends from Tamaroa on the Illinois Central, to Chester, 40.7 miles. The track is laid with sixty pound steel, ties are good, and although there is no ballast the surface and line are good. There are no bridges of importance, and the accommodations seem to be sufficient for the business offered.

#### IMPROVEMENTS.

During the past year many notable buildings and bridges have been constructed for the convenience of traffic and the safety and comfort of passengers. The finest station building in the west has been finished this year, namely, the Grand Central Station in Chicago, on the corner of Harrison street and Fifth avenue. This station is intended for the use of the Chicago and Northern Pacific Railroad, the Wisconsin Central lines, and the Chicago, St. Paul and Kansas City Railroad. The building has a frontage of two hundred and twenty-six feet on Harrison street, and eight hundred and thirty-seven on Fifth avenue. A portion of the building is seven, and the remainder four stories in height, with a tower two hundred and twelve and one-half feet high above the sidewalk. Facing upon Harrison

street is a very large carriage court one hundred and seventeen feet deep and one hundred and forty-nine feet wide. The train shed is five hundred and sixty-two feet from out to out, having a clear width of one hundred and nineteen feet. The depot tracks and station yard switches are controlled by a twenty-four lever electro-pneumatic signaling and switch machine. No expense has been spared to make this the finest station in Chicago, complete in all its appointments and grand in its design.

The St. Louis Merchants' bridge, which was opened May 3, 1890, is worthy of mention, it being the second bridge connecting Illinois with Missouri at St. Louis. This bridge was designed by Messrs. Morrison & Corthell, and built under the supervision of E. L. Corthell, of Chicago. The east approach to the bridge is made on wooden trestle bents. The Chicago and Alton, "Bee Line," and Wabash Railroads are spanned by a truss one hundred and seventy-five feet in length with a forty foot girder.

The style of the three spans of the main bridge is a double intersection pin connected truss, with horizontal bottom chord and a curved top chord. The entire structure is of steel, except pedestals and ornamental parts, which are of cast iron, and nuts, swivels and clevises, which are of wrought iron. The entire bridge and approaches is built for double track. The cost of this bridge is about \$4,000,000, the company having an authorized capital stock of \$2,000,000, and an authorized issue of first mortgage bonds of \$2,000,000. Owing to the delay in completing terminals in St. Louis, the bridge is not open for regular traffic. The terminals on Illinois' shore are being completed, and it is expected that arrangements will soon be completed to accept all business offered.

#### CLASSIFICATION OF ROADS.

We have recently completed a re-classification of the railroads in Illinois. For a time we had in contemplation the making of three classes of roads, A, B and C.; but upon an examination of the tabulated statistics for the year ending June 30, 1890, we concluded that no reason existed for making a third class which had not existed at the time the former classifications were made; and on full reflection, we finally determined to adhere to the division of roads into two classes. Some of the roads which were formerly classed as "B" roads have been in the new classification, put into the "A" class. The number of such roads is not great and the classification as it now stands leaves the roads in the State about equally divided in number between classes "A" and "B." This classification of roads is not in many cases very important. There are few class "B" roads which do not at some points on the line come into competition with roads of class "A," and wherever they do so, they are, of course, under the necessity induced by competition, of making their rates conform to the lower rates of the class

"A" roads; and since the law requires the roads to base their rates upon distances, the competing rates fixed at these points must of course influence the rates at intermediate points so that frequently in the case of a "B" road which penetrates territory which is also penetrated by one or more "A" roads, the rates are by the necessities of the situation almost equalized. However, there are some weaker roads, which have a hard struggle for existence, and which are enabled by being classed "B" to get a slightly increased revenue. The difference, however, in our schedule of rates for "A" and "B" roads does not exceed five per cent. and that only upon certain articles and classes. This is a much less difference, we note, than the difference made in the tariffs of other states between their different classes of roads.

It sometimes happens that the same company operates several different lines of road, some of which lines yield much greater revenues than other lines operated by the same company, but in nearly all such cases the company makes one report for all its lines so that the Commission have no basis upon which it could make any difference in the classification of the different lines of the same company. We see nothing in the law which would prevent us from doing this provided the accounts of the companies were kept in such a way as to furnish us a basis for separate line classification. This is a measure which we have not so fully considered as to enable us to express a definite opinion as to its utility, though we have the matter under consideration and may act upon it soon.

#### IMPROVED COUPLINGS, BRAKES AND OTHER RAILWAY APPLIANCES.

We stated in our report of last year that we were engaged in making certain investigations covering the subject of improved safety appliances for railroads so far as the same relate to the safety of the traveling public, and of the lives and limbs of railway employés. This investigation we have continued during the past year, and the more the subject has been examined the greater has its importance seemed to the Commissioners, and the more difficult has it seemed to treat the subject in a fitting manner in a report of this kind. The only object, perhaps, of our discussing the subject at all is to throw such light upon it by giving information to your Excellency, and through you to the General Assembly of the State, as may lead to wise legislation in the direction of requiring the use of better equipments to the end that human life may be preserved. When it is considered that in round numbers two thousand railway employés were killed and over twenty thousand were injured in the United States during the year ending June 30, 1889, the dangerous nature of railway employment becomes apparent, the same being one death for every three hundred and fifty-seven employed in operation and one injured for every thirty-five men so employed. These figures embrace the entire country. We speak

particularly of employ  s of railroads for the reason that while safety appliances are calculated in a considerable degree to increase the safety of passengers they have a more direct reference to the safety of those who operate trains.

We know it will be said, as it has often been said, that the running of railroad trains is a hazardous calling, known to be such by all men, and that when a man enters upon such a hazardous calling he does so with his eyes open, and takes the risk of maiming and killing, which is well known to be incident to the employment. It is also said that the scale of wages is adapted to the hazard of the business and that men elect to take the chances for the increased pay when they enter upon the business of railroading.

This may be all true enough, looking at the matter from a cold legal standpoint, but it ought not to still the voice of the public conscience nor answer the demands of humanity. Those who enter upon these dangerous callings are almost always young men, many of them boys, to whom the prospect of a dangerous occupation has few terrors but rather tends to stimulate their natural confidence and buoyancy of spirit. The solicitude of the law for the protection of such should rather be increased than diminished because they are brave of heart in the consciousness of youth and strength. Whatever can be legally done, without oppressing or crippling railway companies, for the protection of such should be done in obedience to the dictates of humanity, no less than in furtherance of good railroad practice, which will tend, incidentally, strongly to insure the safety and welfare of the traveling public, whose interest in the matter, though less urgent than that of railroad employ  s, is not by any means to be overlooked.

Those who make the laws are in but very rare cases railway experts. Few of the law-makers have had any personal experience which enables them to know what may be done in a practical way to diminish the terrible fatality of railway service. In no field has the ingenuity of this inventive age been more active than in devising improved railway machinery. So many appliances are offered to the public that it would be confusing to the mind of any but a practical expert to attempt to say what is practicable and what is not with reference to the equipment of railroads. The roads can not, of course, adopt every new untried device which is offered them, but in certain fields practical tests have been made, such as in the matter of couplings, train brakes, heating and lighting of coaches and the like, which put these matters beyond the domain of mere experiment, and show conclusively that better things are within reach.

In view of the character of this subject, we determined that the best method of getting needed information before your Excellency and the General Assembly on which desired action might be based, would be to cause a competent expert to review the whole subject of safety railway appliances. We accordingly, on



the 23d day of July, 1890, directed Mr. Chas. Hansel, our consulting engineer, who is one eminently qualified by experience and study to treat this theme, to prepare for us a comprehensive report upon this most important subject. The report of Mr. Hansel, prepared in pursuance of such request, we herewith transmit to your Excellency, and make the same a part of this report. It will be found printed in full in this cover, and speaks so well for itself, that we need not occupy space in any exposition of its contents, but would rather refer to it as a whole as containing matter which will prove of great interest to those who recommend and pass laws for the public good.

Before leaving this subject we, however, feel constrained to here emphasize the great necessity of hastening as much as possible the universal introduction of two appliances which have particular relation to the safety of trainmen, and the practicability of which has been fully demonstrated, namely: Continuous train brakes, and automatic couplers for freight trains and cars. Of the two thousand railway employ  s killed in the United States in the past year, three hundred were killed in the coupling and uncoupling of cars, and four hundred and ninety-three were killed by falling from trains and engines, and of the injured, six thousand seven hundred and fifty-seven were injured in the coupling and uncoupling of cars, and two thousand and eleven in falling from trains and engines. Thus we have in the United States in one year seven thousand and fifty-seven persons killed and injured in the act of coupling and uncoupling cars alone, and two thousand five hundred and four killed and injured in falling from trains. Those thus killed and injured in falling from trains, no doubt, in most cases came to their injuries while engaged in setting brakes upon the tops of freight trains, a most hazardous business, the necessity of which would be entirely dispensed with if train power brakes were used on freights which could be operated from the locomotive instead of hand brakes which must be set separately by men running from car to car.

Experience has fully demonstrated the efficiency of automatic couplers and of train brakes in actual practice upon passenger trains, which latter trains are now nearly all equipped with the improved couplers and brakes. No reason is perceived why freight trains could not be equipped in the same way. The first expense would no doubt be considerable, but we firmly believe when all phases of the question are considered, that in the end it would be economy for the companies to equip their freight trains as to couplers and brakes in the same manner that all first-class companies long since equipped their passenger trains. The transition period between the two systems will necessarily be fraught with much danger and should be made as short as possible when once it is determined to enforce this large and salutary reform.

It is not our purpose to recommend particular patents or appliances, but rather to endeavor to give information through

the medium of this report to the legal functionaries of the State. Hence with the observations above made, and, referring again to the able paper of Mr. Hansel, we submit this subject for your candid consideration.

#### CROSSINGS AND CROSSING EQUIPMENTS.

In our report for the year 1889, we briefly called attention to the subject of interlocking and signaling devices, and spoke with approval of their introduction at the various crossings in this State. We then said, "Inasmuch as such interlocking systems can at present be introduced only by the mutual agreement of the companies controlling the crossing tracks, and the difficulty of arriving at such agreement often prevents the introduction of interlocking machines where the public good really requires them, we think it advisable that a law be enacted under which some proper tribunal would be designated to hear the cases where there is disagreement between the crossing roads, and with power to make such order covering the case, as may be found under all circumstances to be for the public good."

Our observation and experience since that report was submitted have fully confirmed our expressed conviction that additional legislation is necessary to compel the proper interlocking of crossings. The number of grade crossings in this State is very large. There are two hundred and thirty-one stations where roads cross, not including crossings in the cities of Chicago, East St. Louis and other railroad centers where tracks are concentrated. We have no reliable data for fixing with certainty the number of crossings in the large cities, but consider that a conservative estimate would place the total number of grade crossings in the State at not less than seven hundred. Of this large number only thirty-four have been equipped with interlocking and signaling devices. Those crossings that have been so equipped and are now operated under permits issued by the Commission are shown, together with the style of each machine, by the following table:

# CROSSINGS EQUIPPED WITH INTERLOCKING AND SIGNALING DEVICES.

| File number. | LOCATION.             | CROSSING OF  | No. of levers or wheels. | Date of issuing of permit..... | By Whom Erected.    | Style of Machine. |
|--------------|-----------------------|--|--------------------------|--------------------------------|---------------------|-------------------|
| 1            | Hegewisch.....        | Michigan Central with South Chicago & Southern.....  | 4                        | Sept. 19, 1889                 | Union S. & S. Co..  | Wheel.....        |
| 2            | Bloom.....            | Chicago & Eastern Illinois with Michigan Central.....  | 4                        | April 5, 1889                  | "                   | "                 |
| 3            | Tuner Je.....         | Elgin, Joliet & Eastern with Chicago & Northwestern.....   | 8                        | Feb. 27, 1889                  | "                   | "                 |
| 4            | Joliet.....           | Chicago, Rock Island & Pacific with Michigan Central.....  | 10                       | "                              | "                   | "                 |
| 5            | Perru.....            | Elgin, Joliet & Eastern with Chicago, Burlington & Quincy.....   | 4                        | May 16, 1889                   | "                   | "                 |
| 6            | Bloom.....            | Chicago, Rock Island & Pacific with Chicago & Eastern Illinois.....  | 4                        | April 5, 1889                  | "                   | "                 |
| 7            | Washington H.....     | Chicago, St. Louis & Pittsburgh with Chicago, Rock Island & Pacific.....   | 10                       | "                              | "                   | Saxby & Farmer    |
| 8            | Rockford.....         | Chicago, Madison & Northern with Chicago & Iowa.....   | 12                       | Feb. 27, 1889                  | "                   | "                 |
| 9            | Mazon Bridge.....     | Chicago & Alton with Elgin, Joliet & Eastern.....  | 18                       | "                              | "                   | "                 |
| 10           | Matteson.....         | Illinois Central with Elgin, Joliet & Eastern.....   | 13                       | July 30, 1889                  | "                   | "                 |
| 11           | Coal O'y.....         | Elgin, Joliet & Eastern with Chicago & Alton and Chicago, Santa Fe & California.....   | 9                        | Jan. 17, 1890                  | Nat. S. & Sig. Co.. | Randolph.....     |
| 12           | Kensington.....       | Illinois Central with Chicago & Eastern Illinois.....  | 7                        | Dec. 5, 1889                   | "                   | "                 |
| 13           | Ash St. (Chic.).....  | Chicago, Madison & Northern with Aetehison, Topeka & Santa Fe and Chicago, St. Louis & Pittsburg with Union Stock Yard Tracks..... | 54                       | "                              | Union S. & S. Co..  | Saxby & Farmer    |
| 14           | Barrington.....       | Waukegan & Northwestern with Chicago & Northwestern.....   | 13                       | Jan. 3, 1890                   | "                   | "                 |
| 15           | Spaulding.....        | Waukegan & Northwestern with Chicago, Milwaukee & St. Paul.....  | 8                        | "                              | "                   | "                 |
| 16           | Leifhton.....         | Waukegan & Northwestern with Wisconsin Central.....  | 8                        | "                              | "                   | "                 |
| 17           | Clybourn Je.....      | Chicago & Northwestern with Chicago, Milwaukee & St. Paul.....   | 32                       | "                              | "                   | "                 |
| 18           | Grayland.....         | Chicago & Northwestern with Chicago, Milwaukee & St. Paul.....   | 10                       | "                              | "                   | "                 |
| 19           | Rondout.....          | Elgin, Joliet & Eastern with Chicago, Milwaukee & St. Paul.....  | 16                       | "                              | "                   | "                 |
| 20           | Blue Island.....      | Chicago & Calumet Terminal with Chicago & Grand Trunk.....   | 7                        | Mar. 25, 1890                  | "                   | Horizontal L..... |
| 21           | Montrose.....         | Chicago & Northwestern with Chicago, Milwaukee & St. Paul.....   | 15                       | Feb. 12, 1890                  | "                   | Saxby & Farmer    |
| 22           | Johnstone.....        | Chicago & Calumet Terminal with Chicago, Milwaukee & St. Paul.....   | 6                        | Mar. 29, 1890                  | "                   | "                 |
| 23           | Chicago, 49th st..... | Chicago & Calumet Terminal with Wabash Railroad.....   | 33                       | "                              | "                   | "                 |
| 24           | Chicago, 79th st..... | Chicago & Western Indiana Double Track Junction.....   | 28                       | "                              | "                   | "                 |
| 25           | Coloma.....           | Chicago & Rock Island & Pacific with Chicago, Rock Island & Pacific.....   | 6                        | "                              | "                   | "                 |
| 26           | Dwight.....           | Chicago & Alton with Indiana, Illinois & Iowa.....   | 6                        | April 17, 1890                 | "                   | Horizontal L..... |
| 27           | Summit.....           | Chicago & Calumet Terminal with Chicago & Alton.....   | 6                        | "                              | "                   | Saxby & Farmer    |
| 28           | Bridgeport.....       | Chicago, Madison & Northern, Chicago & Alton, and Aetehison, Topeka & Santa Fe.....  | 36                       | "                              | "                   | "                 |
| 29           | Gardner.....          | Chicago & Alton and Kankakee & Seneca.....   | 6                        | May 23, 1890                   | "                   | Horizontal L..... |
| 30           | Gal a.....            | Chicago, Burlington & Quincy with Rock Island & Peoria.....  | 16                       | "                              | "                   | Saxby & Farmer    |
| 31           | Jacksonville.....     | Chicago & Alton with Jacksonville Southern.....  | 7                        | Nov. 12, 1890                  | "                   | Horizontal L..... |
| 32           | Washington B.....     | Chicago, Rock Island & Pacific with Chicago, St. Louis & Pittsburgh.....   | 25                       | Sept. 29, 1890                 | "                   | Saxby & Farmer    |
| 33           | Matteson.....         | Illinois Central with Michigan Central.....  | 11                       | "                              | Johnson Sig. Co..   | Johnson.....      |
| 34           | Tower Hill.....       | Cleveland, Cincinnati, Chicago & St. Louis with Ohio & Mississippi.....  | 12                       | Dec. 2, 1890                   | Union S. & S. Co..  | Saxby & Farmer    |

Total number machines, 34. Total number levers or wheels, 452. Permits were never granted for Nos. 1 and 5, devices not put in. Nos. 19 and 24 include two crossings in each case.

This leaves the approximate number of six hundred and sixty-six crossings unequipped with any devices for the protection of life and property at said crossings; and we have reason to believe that the employes of roads do frequently, either through negligence or purposely, disregard the statute which requires that all trains shall come to a full stop before passing over the crossing of another road, unless authorized to do so by a permit of the Commission, which can only be given when the crossing is properly interlocked.

#### THE JACKSONVILLE DISASTER.

The recent appalling disaster at the crossing of the Chicago and Alton and Wabash roads, at Jacksonville, Illinois, though happening after the date of this report, is thought of so much importance that it should be mentioned here and considered in connection with the topic of needed legislation. We have been at some pains to collect the facts surrounding this accident, so far as the same might guide us in our duties with reference to matters of this kind. Our function in the premises can, of course, be no more than the recommendation of such measures for the consideration of your Excellency and the General Assembly as may hereafter tend to prevent what, in this case, seems a needless loss of human life.

The facts of the Jacksonville disaster are in brief these: On the night of Dec. 5, 1890, the Kansas City limited express on the Chicago and Alton road had made its regular stop at the Jacksonville station, and was standing with the chair car of the train immediately across the track of the Wabash road. The train was about thirty minutes late. Had it been on time it would have been out of the way, and the crossing would have been clear. It is the custom, we believe, of the Alton road to stop its west bound trains across the Wabash track at this place, the depot being so located as to render that necessary. While this is in itself bad practice, we realize that in the case of joint depots at the junction of roads it is not uncommon for the location to be such that trains stop across the tracks of other crossing roads; and, so long as the employes of both companies obey the law, there is no need of any resulting accident. The law expressly directs each engineer in charge of a train to come to a full stop within eight hundred feet of any railroad crossing, and ascertain that the track is clear before proceeding with his train. Had this injunction of the statute been obeyed by the Wabash engineer, he would not have proceeded until the crossing was cleared by the express train of the Chicago and Alton. It, however, appears clearly from the evidence that the Wabash engineer made little or no effort to comply with the law, notwithstanding his testimony to the contrary. The engineer of the Alton train heard the train approaching upon the Wabash road, which train was loaded with coal, and realizing from the rate of speed the train was making



that it was probably not under the control of the engineer, attempted to pull his train off the crossing, but succeeded only in pulling up one car length, bringing the middle of the sleeping car "Matterhorn" immediately across the Wabash track, at which juncture the Wabash locomotive crashed through the sleeper, instantly killing two men and injuring others, one so severely that he soon afterwards died. The clean manner in which the locomotive cut through the sleeping car makes it very evident that the Wabash train must have been proceeding at a high rate of speed; and such a rate of speed at this point of crossing cannot be at all reconciled with the Wabash engineer's statement that he shut the steam off of his locomotive one and a half miles before reaching the Alton crossing. There is between the point designated by him as the one at which he shut off steam and the Alton crossing a sharp up-grade near three-quarters of a mile in length. It is scarcely conceivable that the train, although a heavy one, would by its own momentum have climbed this grade and struck the Alton train with such velocity had the steam been shut off at the point stated, even though no brakes had been set; and when the testimony of the engineer, that he called three times for brakes, and that of the Wabash brakemen, that they answered said call by setting brakes as fast as they could, are remembered and considered in connection with the great force of the blow upon the Alton train, the incredible character of the testimony reaches the limits of the impossible. The case looks much to us as though the Wabash engineer was either wholly inattentive, or else intended to run the crossing without stopping, relying upon the fact that the Alton had no train due to be at the Jacksonville crossing at that time, and that the hour was late enough so the infraction of law was not likely to be observed and reported.

We have on file all the evidence taken in regard to said disaster, and we have obtained a profile of the Wabash road showing grades as they affect the question of stopping this train. Had the engineer given the signals as he states, and the brakemen obeyed them as they state, they would, we think, have set every brake on the train before it arrived at the crossing; and besides, unless the train was going at an almost incredible rate of speed, it would have required few brakes to stop it; provided the engineer ceased to work steam as he states.

We have thus commented upon this accident in this connection because it peculiarly points the necessity, that crossings such as that at Jacksonville, (and there are hundreds of them in the State) should in the interest of safety and humanity, be equipped with interlocking devices, which is the point of our present discussion. The law as it stands confers no adequate power upon this Commission to compel the interlocking of crossings. A majority of the Commission are of the opinion that it does not even authorize them to compel the putting in of interlocking plants at new crossings, and an opinion of the majority of the

the Commission to that effect will be found in the appendix, and is here referred to as a general expose of the views of the Commissioners as to their powers under the crossing act.

We therefore urgently present to your Excellency the necessity of recommending the passage of a law by the General Assembly requiring that all crossings in this State be equipped with interlocking devices such as may be approved by the Commission. These interlocking devices are of different cost, the cheapest kind that is effective for a plain crossing costs about \$2,500. The original cost, however, is of less consequence than the annual cost of operating and maintaining such devices, there being required the services of two men to relieve each other so that one man can be always in the tower to operate the machine. The salary of these men may be estimated at from \$40 to \$45 per month apiece. The cost of maintaining the apparatus would not be great; and it might probably be safely said that an original cost of \$2,500, and a subsequent annual outlay of \$1,200 per year will be required to equip each plain crossing in the State, to be borne by the two companies either equally or in different proportion as may be determined upon the equities of each case. In neighborhoods where more complicated and expensive machinery would be required, the cost would be much greater. Such are those crossings in large cities where there is a complication of tracks. A single interlocking device in such a place may often cost from twenty-five to forty thousand dollars; but generally in such cases the cost is paid by a number of roads, and is therefore not as heavy upon each road as a statement of the same would seem at first to indicate. It is probable, too, that companies equipping all their crossings at one time, could get considerably better terms than are above stated, because they would be in that case buying a large number of machines at one purchase.

Inasmuch as there are some crossings of small roads which run but few trains, and which, therefore, do not present the same dangers which are presented by those roads which run numerous trains, a law may be thought sufficient which would vest in the Commission a discretion over the question as to what crossings should be interlocked. There may be cases, too, where it would be inequitable to require the expense of the interlocking to be borne equally between the companies. One company may run many trains and carry an immense traffic in passengers and freights, while another company which crosses this line may run not more than two or three trains per day. There are such cases that we know of, and it may be doubted whether in such a case it would be fair to require the weaker company to pay as much of the cost as the stronger one. Should this view of the case be taken by your Excellency, or by the General Assembly, the necessity will be apparent of fixing some tribunal, (which would probably be the Railway Commission) to fix in each individual case the amount to be paid by each of said companies toward equipping the crossing with in-

terlocking. That additional legislation should be had upon this question, does not, in the mind of the present Commissioners, admit of any doubt.

Had the crossing at Jacksonville been equipped with an interlocking plant which would have ditched the Wabash train at the derail point, it is highly improbable that the engineer of that train would have come up to the crossing with any such reckless rate of speed as that at which he was running. If the safety of others was not a consideration that would deter him, the safety of his own neck would have been quite certain to have influenced him differently, and he would have, almost certainly, approached this crossing "under control." It may be that the customary distance of three hundred feet for the derailing point would not have been sufficient to stop the Wabash train at the great rate of speed at which it was evidently proceeding; but the engineer never would have approached the crossing at any such rate of speed had he known that a derailing switch was open to throw his train from the track. We earnestly commend this subject to your attention.

#### REFRIGERATOR CARS.

A subject which has not received the attention of the General Assembly is that of refrigerator cars. The statute of this State provides that this Commission shall make "a schedule of reasonable maximum rates of charges for the transportation of passengers and freights," etc. It frequently happens that shippers desire to have carried articles which are perishable, and which, particularly in the summer time, require to be carried in cars of a particular construction which will guard against the heat. These cars are generally furnished by a company different from the carrying company, and this company charges a sum for the use of its facilities over and above the freights allowed by the schedule of the Commission for the simple "transportation" of the freight. It is claimed that an extra service is performed with reference to this freight over and above what is taken into consideration in fixing the schedule of maximum rates. Just how far the Commission have, under the statute, power over the question of what are reasonable charges for this extra service rendered by those who furnish refrigerator cars, or cars of some peculiar construction required for the transportation of perishable freights, may be regarded as a question of some difficulty. It would seem it might, without straining the law, be held that as the general progress of carrying appliances brings into use new and improved methods of carrying for freights in transit, that a new and increased duty attaches to the carriers to provide themselves with such improved facilities, where the same are not so expensive as to render the requirement unreasonable. It would not seem just that railroad companies and transportation companies, alone should reap the pecuniary benefits arising from the general progress of discovery. The community, as a

whole, surely has some right in those improvements which in this age are constantly leading to higher and better forms of commercial activity. We are not at this time prepared to make a recommendation upon this subject, but it is one which we think may well be mentioned here for the serious consideration of your Excellency and of the General Assembly.

#### A COMMON SEAL NEEDED.

We think the law should be so amended as to provide that this Commission may keep and use a common seal for the authentication of its proceedings, and that provisions should be made for the authentication of its reports and papers by copies certified to by the Secretary of the Commission under the seal of the Commission, substantially in the manner that is now provided in the case of records of courts. It sometimes occurs that it is important to prove the action of the Railroad Commission in court. Outside of the provision of the statute as to the admission in evidence of the schedules of said Commission, there is no way which our proceedings could be proven, except by carrying the record books of the Commission into court and taking the Secretary along as a witness to their correctness. All this we think could be obviated by providing that the Commission may keep a seal and may authenticate its proceedings by the use thereof. We recommend that a law be passed to the effect suggested.

#### LIVE STOCK RATES.

We have the honor to report to your Excellency that we have adopted and published, as provided by law, a new schedule of maximum rates to be charged for the transportation of live stock by the roads of this State. This new schedule is to go into effect January 1, 1891, and the same is based upon weight, the freights under it to be computed at so many cents per hundred pounds of live stock actually transported.

In submitting this new tariff of maximum rates of freight upon live stock, based upon weight as distinguished from the car-load basis, the Commission deem it proper to recount the history of the investigation and discussion which has been had touching the relative merits of these two systems.

While hundred-weight rates upon live stock have never been formally adopted by the Commission, freights have in fact been computed by the roads upon the hundred-weight basis since January 1, 1889. When the present members of the Commission came into office they found the freights upon live stock then being computed upon the hundred-weight basis, as it had been some time before their accession to office.

There had previously been extensive preparation for the change made by the roads of the State in the way of experimental weighing, and in procuring statistics upon which it was pro-



posed by the roads to inaugurate the weighing system. Many of the shippers of the State had, however, filed a formal protest, or complaint before the Commission objecting to the proposed change. This protest or complaint, it appears from the record, after some preliminary meetings, came up for final hearing before the Commission at Springfield, on June 30, 1887.

The record kept by the then Secretary of the Commission, which is the source of our information upon this subject, recites that the leading railroads of the State were, at this meeting, represented by their officials, in most cases by their general managers, and that the shippers were represented, as the record further recites, by "one hundred delegates."

The record further recites that after the meeting had been called to order and the object thereof stated, a request was made on behalf of the shippers that time be granted in which to hold a preliminary meeting with the railroad officials before proceeding with the hearing; that such time was granted and the Commission adjourned until the afternoon. The record further shows that in the afternoon the parties again all came before the Commission, and it was then stated that the companies and the shippers had come to a satisfactory agreement among themselves; and the shippers thereupon withdrew their protest and asked that the matter be dropped without further present action by the Commission, which was accordingly done.

Such, in brief, is the history of the subject, so far as official action by the Commission is concerned. The present Board found the weighing system in full operation, under some arrangement made with the "one hundred shippers" who attended that meeting at Springfield as delegates, the exact terms of which arrangement were not made a matter of record before the Commission and are in fact unknown to the present Commissioners.

In view of the manner in which the weighing system was thus originally begun, and particularly in view of the fact that, at its inception as an experiment, it had the sanction of a large, if not a representative body of the shippers of the State, the present Commissioners have not felt at liberty to act with haste in the premises, nor to arbitrarily change the practice thus entered upon. We believed it prudent to wait until such time as substantial results and fair conclusions could be arrived at from actual experience with the weighing system. That time has now, we think, arrived; though it cannot be said our data was sufficient on which to have acted intelligently at a much earlier time. Those who have upon them, and duly measure, the responsibility of binding action, can rarely keep pace with the flippant advice of those, who, wholly without responsibility, are ready to direct with great confidence, and without reflection, the gravest affairs of the world from the standpoint of the smallest possible information.

The old Commissioners' schedule of maximum live stock rates, which became practically a dead letter by the tacit consent of our predecessors, was highly unsatisfactory and illogical. Though the amount of freights it took from shippers was not seriously complained of, it had been outgrown and needed revision. Adopted when stock cars were of a uniform length of twenty-eight feet, it took no account of the widely varying sizes of new cars. The managers of roads, in their intense competition for stock shipments, began years ago, to increase the size of their stock cars; and now these cars range all the way from twenty-eight to thirty-six feet in length; there being now, perhaps, more cars of thirty-five feet length than of twenty-eight feet, on which latter the car-lot rates were originally based. Under the old schedule, however, a car was a car, whether long or short. We are aware some roads actually added something to the Commissioners' rates for the longer cars; but this was without any recorded authority from the Commission; and we understand that the only decision ever made by the Commission, though unrecorded, was that the length of the car could not be considered in fixing the freight; that a car was a car, whatever the size.

So, if, on the one hand, the railroad could get no more for a long car, the shipper on the other hand could get no reduction for a short one, provided the Commissioners' tariff was observed. The inequality and injustice of such a tariff is obvious, and no doubt greatly assisted the old schedule to go into that state of "innocuous desuetude" where the present Commissioners found it upon their accession to office.

The objections then, to the old car-lot rates, may be summarized as follows:

1. That under them freights were paid unequally by the shippers.

2. That they created a demand for the longest cars only, shippers being unwilling to take small cars when long ones could be had under the Commissioners' tariff at the same rates.

3. That they held out a constant temptation for shippers to overcrowd cars, the freight depending entirely on the car, and not on the amount carried in it.

Such, briefly, was the situation of matters when the present Board came into office in March, 1889. Complaints had already begun to come in to the effect that the roads were charging more freight under their new system of hundred-weight rates than were charged under the old car-load system. It was further alleged that annoying delays were occasioned to shippers of stock who, it was said, were compelled to wait an unreasonable length of time for the weighing to be done at the scales in Chicago, thereby delaying shippers in getting their stock upon the market, and also further delaying them in getting their settle-

ments with the commission men, who frequently had to wait for the freight bills to be made out, before rendering their accounts and settling with the shippers.

These complaints have been extensively investigated by the present Commissioners in a period extending for several months, and much testimony has been taken from the shippers of the State and from some officials of the companies. Much of this testimony was taken down and is on file, and much of it was not preserved in writing. Of course, there has not been full agreement among all the shippers who have testified; but the general expressions of shippers to the Commission have been to the effect that if rates by the hundred-weight were fixed at a point where they would not increase the revenue previously charged by car loads, and if a better system of weighing were adopted more accurate and expeditious than the present, they would not object to hundred-weight rates as such. In other words, the principal sentiment among shippers, as recorded in their testimony before us, seems to be that a system that bases the freight upon the amount in weight actually transported, is in itself fair. In this view the Commission entirely concur.

We have been convinced, however, by the testimony taken, that the rates upon live stock were slightly raised to the domestic shippers by the several roads of the State when the hundred-weight system was put in operation. We are further of the opinion that such live stock rates were amply high under the old system; and we have endeavored, in the distance tariff now published, to reduce the rates to what we think fair, taking into consideration the low price at which live stock is selling, and all other facts which should legitimately enter into the problem. The rates now fixed will certainly prove to be no higher on the average than the old car-load rates in force before the change was made, and with which shippers have almost universally expressed themselves as satisfied.

It is, of course, not possible to adopt a tariff upon the basis of weight which will, upon each individual car, yield the exact freight revenue that would be realized from the former car-load rates. Upon an exceptionally heavy load of stock the shipper will undoubtedly pay more freight than he would if his freight were computed simply upon the car; but upon the other hand, when he ships a lighter load he will pay less than he would have paid; and the freight will, in every case, be according to the service. The Commission have endeavored, upon a very full study of the question, and particularly of the statistics they have obtained, to hit upon what will prove a fair rate, and express the hope that the same may prove satisfactory alike to shippers and to the companies.

With reference to the complaints as to the inaccuracy of weighing and delays in getting stock upon the market and

making settlements, occasioned by the new system, the Commission is satisfied, from the evidence before them, that accurate weights cannot be obtained upon the track scales now largely in use; and, while the hundreds of freight bills that have been exhibited to the Commission appear to show that on the average the weights on actual shipments have been quite low enough, as ascertained by comparing the freight weights with the yard weights, and making necessary deductions for filling, yet it is desirable that a system of weighing should be used in which shippers can have perfect confidence, and which can be relied upon to wrong neither party to the transaction. If a shipper happens to get weights at one time several hundreds or even thousands of pounds too small, that fact is itself proof of looseness and inaccuracy, and that at another time the error may be the other way. Hence, the desirability of adopting an accurate system of weighing; one which, while ascertaining the weight accurately, will, at the same time, avoid the delays complained of, which the Commission are satisfied at the present time, in the case of most roads, are quite vexatious to shippers and not at all necessary under a proper plan of weighing.

We are clearly of opinion that the best way to get the weight of the live stock shipped, if the method were practicable, would be to weigh at the point of shipment, before loading the stock in the cars. The billing could then be made upon actual weight instead of arbitrarily putting in the bill a nominal weight which must be corrected at the destination upon the true weight being ascertained. This method would necessitate the putting in of scales at so many points, and at so great expense, that it was thought it would work an undue hardship to the roads; although if at all feasible, we are convinced it would be the proper plan. It would also fail in practice at many points where stock is shipped in small quantities, but at which no agent is kept, there being no need of an agent for other purposes. To compel the roads at such points to put in cattle scales, and also to keep there agents, whose sole business would be to weigh and bill a few cars of hogs and cattle each year, would amount to compelling the roads to lose money on the business of such points. This would not be just; and, being unjust, it would not be lawful. Besides, reasonable freight rates cannot in the end be gotten by means that would oppress or cripple railroads. A man cannot get his wagon out of the mud by cutting the hamstring of his horse, even though the horse be a balky one.

A plan of weighing which we deem both just and practicable is for the several roads to put in at the stock yards a series of scales upon a platform of the height of a car floor, alongside of which platform the trains can be drawn up to discharge the stock. There should be a scale for each car, so arranged that the gates of the pens enclosing the scales opening, will form chutes, through which the stock from each car will pass on to



the corresponding scale. Then, upon the opposite side of the scale from the car should be another gate, through which each car of stock when weighed could pass off into a pen, and thence into the yards as desired. Care should be taken to arrange the scale gates so that stock would not need to be headed about and driven back through the same gate at which they pass onto the scale. Fat stock, particularly cattle, and especially in hot weather, are greatly injured by any handling that worries and frets them. Hence, facilities should be used which will obtain the weight quickly, and then allow the stock to pass on in the same direction to the pen.

There is no reason why scales of the kind described would not weigh accurately. The results would be greatly better than can be gotten by the present method of catching the weight as the cars pass over track scales, in which process unequal heights of couplers often throw part of the weight of one car upon the wheels of its supporting neighbor, to say nothing of the disturbing influences of wind and weather. Then, too, with chute scales of the kind described there would be no waiting for the stock cars to be again passed over the scales to get the weights of empty cars for deduction, before the freight bills could be made out.

All things considered, scales of the kind described, we think, should be put in and used by the several roads. We think the roads themselves would profit by the use of such scales; for hundreds of freight bills have been exhibited to us which prove, when freight and yard weights are compared, that the weighers, perhaps in their anxiety to satisfy shippers and vindicate the system used, have actually made weights too low.

The Illinois Central and the C. & E. I. companies have in use scales which in most particulars correspond with those here recommended; and, as a result of their use, we have heard few complaints, either of inaccurate weights or of delays arising against these companies.

It is proper to observe before leaving this subject of live stock scales, that the railroad companies have contended with justice that it would be a hardship to require them at large expense to fit up facilities for weighing, such as we have recommended, unless some assurance were given that the weighing system would be continued, provided it proves, in other respects, efficient and satisfactory. The companies generally have expressed a readiness, if the hundred-weight system were adopted and legalized, to put in chute scales and all necessary facilities to make weights accurate and satisfactory. The uncertainty being now removed, it will be in order for these expressions to be put speedily into practice.

In consideration, therefore, of what we deem the inherent fairness of the weighing system, and the further fact that we believe the inconveniences and drawbacks brought to our notice in connection with the system are susceptible of being almost

entirely removed, we have concluded to put in force a schedule of hundred-weight rates upon live stock, which will not, in the matter of freights, in any degree increase the burdens of shippers as they existed before the weighing experiment was commenced. We think our schedule will diminish rather than increase the former car-lot rates; but when we say this we, of course, have in view the average of rates taking the State over. Some roads may give better rates than others, and particular sections of the State, owing to local causes, have perhaps been accustomed to have better rates than others. Our field is the entire State, and our tariff is strictly a distance tariff, such as we think the law requires. We could not undertake to preserve the existing relative conditions in all places. If some who have been particularly favored heretofore do not find themselves benefited by this comprehensive and uniform tariff, they should remember there are many others who were less fortunate who will reap benefit from the new order. Other things being equal, "equality is equity," and this equity we have sought to establish.

We may add that the Inter-State Commerce Commission, after a hearing had at Jefferson City, Mo., upon this subject rendered an opinion approving of the hundred-weight system of computing freights upon live stock. Our action is therefore in harmony with the views of the National Commission on this subject and we have little doubt that the system will ere long become universal. All other freights are now based upon weights and there is surely the same reason for weighing live stock that there is for weighing other freights, provided the annoyances above commented upon are removed, which we think can easily be done.

We, however, have adopted this hundred-weight tariff with the understanding and upon the condition that the railroads of the State will make arrangements within a reasonable time whereby accurate weights may be obtained without unreasonable delays.

Should the roads fail to make such arrangements as will effect the object here stated, then the Commission may feel at liberty to return to a car-load tariff corresponding in amount of revenue yielded to the rates allowed in the tariff we have adopted.

We are not unaware that the system is even yet in an experimental stage, but have a strong belief that, with a tariff such as now proposed, and with such weighing facilities as the principal roads have proposed to adopt, shippers as well as railroad companies will like the system better than the old one. To pay in exact proportion to the extent of the services rendered, is certainly in itself equitable.

Should it be found on further actual practice, that those features of the weighing system which have not given satisfaction to shippers are not remediable, or being so, the roads

fail or refuse to put in force the proper remedy, it will then be in the power of the Commission to adopt a more satisfactory system.

#### UNIFORM CLASSIFICATION.

In the last annual report the Commission referred to the disadvantages resulting from the use of varying classifications upon freight carried within the limits of our State.

The Official Classification, so called, applies on all freight originating east of Illinois and destined to points within this State; in other words, it governs on all through shipments from the east as far west as the Mississippi river; while the Western Classification which is used by the roads extending westward from Chicago and St. Paul, applies on business from all points in this State to the territory west thereof.

Thus, on all goods manufactured at eastern points and handled by dealers in Chicago or other distributing centers in Illinois, the Western Classification is applied when such articles are re-sold for delivery to points in trans-Mississippi states.

The same is true of commodities manufactured in this State and sold in competition with similar articles produced east of Illinois and forwarded to western destination. In all such instances wherein the Official Classification rates articles lower than does the Western, dealers in this State are at a disadvantage both as compared with competitors in the east and with those located at Mississippi river cities. For example, the Official Classification rates hardware third-class, while in the Western it is classified second. In Chicago and St. Louis respectively, are wholesale houses among the largest in the country engaged in the hardware business. Their supplies are obtained mainly in the east.

Manifestly, then, the Chicago houses are at a disadvantage compared with their competitors in St. Louis because the latter have their goods carried two hundred miles further westward than Chicago houses at third-class rates.

With Chicago houses the lower rating stops at that city, and when they re-ship, it must be at second-class rates; hence, on shipments to common points west such as Kansas City or Omaha the Chicago dealer, on his sales, is subject to second-class rates for a distance of two hundred miles more than is his competitor at St. Louis or other Mississippi river cities.

Furthermore, the same roads which charge Illinois houses second-class rates on their shipments join with eastern roads in carrying through Chicago, Peoria and other gateways, at third-class rates, as far as the Mississippi river. No sufficient remedy for such discriminations can be found except in the adoption by eastern and western roads of a uniform classification.

The illustration made of hardware may with like force be applied in the case of all articles which by the Official Classification are rated lower than in the Western.

The disabilities herein indicated are greater in the case of citizens of this State than in any other section north of the Ohio river for the reason that in Illinois there is an over-lapping of freight classifications. East of Illinois the Official governs alike on through business and on shipments carried locally in each state; and west of the Mississippi river the Western Classification is applied on through shipments to the Rocky mountains and beyond, whereas in this State three classifications are in use—the Official, Western and the one prescribed by the Commission. Clearly it would simplify matters and facilitate the transaction of business were the rules and classification for the transportation of all freight carried into, within or out of this State to be made uniform.

Entertaining this view the Commission did not hesitate to encourage all efforts put forth by the railroad companies or by other authorities to inaugurate uniformity in the classification of freight.

In furtherance thereof the delegation from this State to the convention of Inter-State and State Railroad Commissioners held in Washington, D. C., last May, introduced a resolution reading as follows:

*“Resolved.* That the public interests will be best subserved by the adoption of a classification which shall be uniform for our whole country.”

After a discussion which elicited much that was of interest, the proposition above recited was unanimously adopted.

The action thus taken is mentioned with cordial approval in the subsequent annual report of the Inter-State Commerce Commission.

Meantime a committee of traffic officers who, at the time of their appointment, were thought to fairly represent the railroads in the various sections of the country, had been authorized to unify the three leading freight classifications in use, namely: the Official, the Western and the Southern Railway and Steamship the latter being the one used by the carriers operating south of the Ohio river. That committee, at such intervals as their regular duties would permit, worked at the task assigned them for nearly two years. The result was the adoption by unanimous vote in May last of the unified classification the committee had succeeded in evolving.

Several weeks elapsed before corrected copies of the work performed could be laid before the interested roads; and it was not until late in the year that the roads most directly concerned began to vote upon the adoption of the committee's report. Meanwhile the demand for uniformity had grown so rapidly that the adoption of the report by the railroads apparently became a foregone conclusion.



The committee proposed that it be made effective January 1, 1891, but the changes contemplated are so radical, extensive and far-reaching that a later date must be substituted, and it is now believed that it will not be possible to make it generally operative much, if any, before mid-summer 1891.

It should not, however, be expected that with the adoption of the proposed uniform classification every shipper of freight will find himself specially benefited. In uniting three varying classifications, necessarily some advances will be made, because if the committee entrusted with the duty, had, in the new work, given each article the lowest rating shown in either existing classification no discretion or judgment would have been requisite, but simply a tabulation of the lowest designations.

Such a classification would, of course, have been rejected by the railroad companies. Uniformity could not be accepted by them at so great a sacrifice. Concessions had to be made, but those, it was believed, should not proceed solely from the carriers.

Shippers should be expected to contribute somewhat to the procurement of a boon so estimable and convenient as the adoption of a uniform classification of freight throughout the greater portion of the country. This fact, those who find the articles (few in number) in which they are especially interested have been advanced, should bear patiently in mind.

Furthermore it should be remembered that any work of this kind must necessarily be largely tentative. The report of the committee on uniformity in freight classification expressly states that their work is by no means perfect or complete, and they provide a machinery to improve the classification from time to time, and eventually mould it into acceptable shape. Thus, provision is made for a permanent board of traffic officers who shall meet at stated periods to make changes in and additions to the classification.

Representations will doubtless be made to that board by organizations and individuals desiring modifications of the classification, and requests thus presented, it is to be presumed, will be given due consideration, and Mr. J. R. Wheeler, a member of this Commission has been appointed to represent the business interests of Illinois before said board.

A beginning in the direction of uniformity had to be made. It could not be inaugurated by the Inter-State Commerce Commission as the statute creating that body now stands; hence, it had to originate with the railroad companies; and by their representatives it was concluded the movement could best be started in the way it was begun and carried on.

## GRAIN INSPECTION AND REGISTRATION.

The largest volume of business ever transacted in a single year by the grain inspection department at Chicago is that shown in the reports of the Chief Inspector and Warehouse Registrar for the year ending October 31, 1890, exceeding, as it does, the hitherto phenomenal year of 1880 by over forty-eight million bushels.

The amount of grain stored in elevators, while it does not bear its usual ratio to the amount received, is still above the average for the past ten years.

The increase of business for the past two years, while it has had the natural effect of increasing the sum total of the department expenses, has reduced the cost of inspection per bushel to a point much below the average, and has made two reductions of the fees for inspection possible, one in 1889 from thirty-five cents to thirty cents per car and a further one recently made to twenty-five cents per car.

The position of the department in its relations to the public is one of peculiar difficulty and responsibility.

It stands as an arbitrator between buyer and seller, between producer and consumer, and practically fixes the value of the immense quantities of grain passing under its supervision. At times it is subjected to violent pressure in one direction from the receivers, and again in the contrary direction from eastern buyers, and to harsh, and often unmerited, criticism from both.

Under such conditions it is worthy of remark when the department is so conducted as to steer clear for any considerable time of Scylla on one side and Charybdis on the other and give satisfaction to both. Any failure to do this, however, is reflected with great accuracy in the office of the Commissioners, to whom any general complaint of deviation from the established standards in either direction is sure to come; and judging from the absence of such complaints, as well as the expressed favorable opinion of prominent grain merchants and others interested, we believe that the work of the department during the past year has been executed with unusual care and discretion, and the rules interpreted with commendable fairness and intelligence.

While no change of rules has been deemed advisable or necessary by us in adjusting differences of opinion between the department and the conflicting interests with which it has to deal, it has been our policy, as it has been the aim of the Chief Inspector, to secure such fair interpretation and impartial application of existing rules as to do exact justice to producer and shipper and at the same time to maintain the enviable reputation borne by the certificates of the department in the markets of this country and Europe. In this we believe we have been fairly successful.

The reputation of Chicago inspection, which has been of slow and steady growth, has practically changed the business meth-

ods of the grain trade wherever American cereals are consumed, and it is not too much to say that the pre-eminence of Chicago as a grain market is due in as great measure to the public confidence in the integrity and accuracy of the work of her inspectors as to her favorable location, her unsurpassed facilities or the push and enterprise of her citizens.

Large quantities of grain are annually diverted from other channels of transportation to those passing through Chicago in order to secure the advantages of "Chicago weights and inspection."

A sufficient evidence of the esteem in which the Chicago department is held by the trade, the confidence with which its decisions are accepted and the demand for its certificates as a basis for values in other markets, is found in the history of the state inspection established some two years ago in Joliet.

Under the same state supervision as Chicago, and governed by precisely the same rules, accurately interpreted and faithfully administered, it has thus far failed to realize the expectations of its promoters in attracting the grain to which they felt their facilities entitled them.

There is little question that much of the grain which now makes its laborious way in immense quantities over the burdened tracks and through the crowded yards of Chicago in order that it may reach its destination with its quality certified by an authority upon which the trade has learned to depend, might be handled more promptly and quite as economically by way of Joliet, if public confidence in the inspection at that point were as thoroughly established as the quality of the work done there would warrant.

There have been requests for the establishment of branches of the Chicago inspection at other points in the State upon direct eastern lines of transportation, the purpose being to secure the benefit of Chicago inspection without diverting the grain from its natural eastward channels.

While the establishment of branches at some of these points would no doubt be a benefit to the public, and certainly so to shippers along the lines of roads in question, there seems to be no warrant in the law for any extension of the Chicago system beyond the limits fixed by the statute, and there is no way in which other points in the State may secure state inspection of grain except through the formation of independent systems.

#### THE SITUATION AT EAST ST. LOUIS.

There are at East St. Louis a number of capacious elevators through which large quantities of grain annually pass.

No department of our own system of inspection having ever been established there, the work is done by the officials of the State of Missouri, sent over from St. Louis for that purpose.

It is, we think, a subject proper for legislative consideration whether or not the State of Illinois should, by proper enactment, assert its own jurisdiction over an important and extensive business which is thus transacted within the boundaries of the State.

#### PERIODICAL WEIGHING.

The present warehouse law, while it provides for the inspection of grain as a condition precedent to its storage in any elevator of Class "A", and for a system of reports by which the Warehouse Registrar may know just what receipts are issued and canceled, provides no means of arriving at the quantity of grain received and delivered except through the figures of the elevator weighman, and places within reach of the department no check whatever upon the accuracy of his work.

While we do not regard it in any sense probable, it is certainly possible for a warehouseman, under existing arrangements, by manipulating the figures of the weighman's tickets, to withdraw large quantities of grain without proper cancellation of receipts for the same. The Warehouse Registrar in his report recommends that such amendment be made to the law as shall provide for a balancing of the books and weighing of grain in store as often as once in each year, at the most convenient time, that his accounts may be verified by an actual inventory of the property under the supervision of the state officer. In this recommendation we most heartily concur.

#### BONDS OF WAREHOUSEMEN.

During the year it has come to our knowledge that the provision in the statute requiring the proprietor, lessee or manager of any warehouse of Class "A", before transacting any business in such warehouse, to give bonds in the sum of \$10,000 for the faithful performance of his duty to the public, was being so construed as to allow a firm managing or owning several different warehouses to operate them all under a single bond.

A careful study of the matter convinced us that such construction was subversive of the plain intent of the law, and we adopted an order requiring new bonds to be given, one for each separate warehouse.

We are pleased to note in the report of the Warehouse Registrar that this requirement of the Commission has in all cases been promptly complied with.

#### CLAIMS FOR DAMAGES ON ACCOUNT OF FAULTY INSPECTION.

A question of considerable importance has arisen, incident to the inspection of grain. It had long, we are informed, been the practice of this Commission to pay, from the funds of the inspection department, claims for damages arising from the faulty



inspection of grain. That is to say, under the former practice, where an inspector made a blunder in the inspection of grain whereby the owner or the party buying the grain on certificate was damaged, the Commission recognized the damage so arising as a valid claim against the inspection department, and paid it from the funds of that department, which funds are derived from inspection fees. The immediate predecessors of the present Commissioners, we are advised, doubted the power of the Commission to appropriate the funds of the inspection department to the purpose of paying claims. No express ruling was, however, placed on record so far as we are able to find. A particular claim of this nature is now pending before the present Commission, a formal decision of which has not been rendered, although the Commission has been of the opinion that they are not empowered to pay such claims from the funds arising from inspection. The case referred to is as follows:

Franklin, Edson & Co., of New York, claim the sum of \$1,156.70, required, they say, to make them whole on a certain cargo of wheat purchased by them in Chicago on certificates as "No. 2 red winter," and which on its arrival in New York proved to be in fact of a quality much inferior to that named in the certificate. Proofs were submitted to us which convinced us that the inspection was faulty. The inspector at fault was an old employé of the department, and had, until this occurrence, been regarded as competent and reliable. He has since left the force. The decisive question arising upon the facts is, has this Commission any power under the statute to devote the funds of the inspection department to the payment of damages arising from erroneous inspection? We are convinced that the answer to this question must be found in the statute wherein our duties are prescribed, and whence all the powers of the Commission are derived. Since it has been strenuously urged upon us that to deny this claim, and to refuse to become guarantors for the correctness of our inspection, will seriously discredit Chicago inspection in the markets of the world, we think it proper to state the law as we understand it, for your information and that of the General Assembly.

Section 14 of the act in relation to warehouses contains three provisions which, construed together, seem to us decisive of this question. It is first provided that each inspector shall give a bond in the penal sum of \$5,000, with sureties, the condition of which bond shall be:

"That he will faithfully and strictly discharge the duties of his said office of inspector according to law and the rules and regulations prescribing his duties: and that he will *pay all damages to any person or persons who may be injured* by reason of his neglect, refusal or failure to comply with the law and the rules and regulations aforesaid."

It is next provided that the Commission

"Shall have power to fix the rate of charges for the inspection of grain, and the manner in which the same shall be collected, which charges shall

be regulated in such a manner as will, in the judgment of the Commissioners, produce sufficient revenue to meet the necessary expenses of the service of inspection, and no more."

Finally it is provided at the end of said section 14, that

"All necessary expenses incident to the inspection of grain, and to the office of Registrar, economically administered, including the rent of suitable offices, shall be deemed expenses of the inspection service, and shall be included in the estimate of expenses of such inspection services; and shall be paid from the funds collected for the same."

These provisions seem to leave the case in little doubt. The Commission has no funds at its disposal, except those accruing from inspection fees. We are commanded to fix those fees so as to produce "sufficient revenue to meet the necessary expenses of the service of inspection, *and no more.*" Then, as if to leave no doubt as to what the term "necessary expenses" should embrace, it was further specified that "*all necessary expenses incident to the inspection of grain*, and to the office of Registrar, economically administered, including the rent of suitable offices, shall be deemed expenses of the inspection service."

It is a familiar legal maxim that the naming expressly of certain things, in an act such as this, has the effect of excluding other things which are not named. When telling us what should be "included in the estimate of expenses" and "paid from funds collected for the same," the legislature failed to mention damages arising from erroneous inspection. Unless, therefore, such damages may be said to be a "necessary expense incident to the inspection of grain," they are not authorized to be paid from the funds of the department. These two clauses of the statute, if standing alone, would, therefore, seem to be decisive of the question. Damages of this kind can hardly be called a "necessary expense incident to the inspection of grain."

But all possibility that the legislature intended to include such damages as an "expense" of the department is rebutted, it seems to us, by the fact that in the clause of the statute first quoted above, express provision is made for the payment of such damages by the inspector and his sureties. The condition, prescribed by statute for the bond of the inspector, is exclusively for the protection of "any person or persons who may be injured." It is a noticeable, and it would seem, decisive fact that the bond is not for the protection of the inspection fund in case the Commission should pay such damages, but runs entirely to third parties who may be injured. Should the Commission step in and pay this inspector's liability, it is doubtful if the language of the bond, as prescribed by the statute, would admit the Commission to reimburse the department funds by a suit against the inspector's sureties. That the inspector and his sureties in this case are liable to Franklin, Edson & Co., upon this bond, provided they can prove their case in court, admits of no question. This bond was taken to meet just such a case as this and for no other purpose.

Much has been urged upon the score of public policy. We have been exhorted to adopt a rule for such cases that will invite the confidence of the public, etc. To this we can only say the Commission is not at liberty to set up any policy unless that policy finds warrant in the statute. We do not control the general policy of the State touching such questions. We can exercise the powers given us by statute, and no others, and it is a rule too well settled to require the citation of authorities that the powers of a commission, such as this, cannot be extended beyond what is expressly granted, or necessarily implied in the carrying out of the objects of the law. If we are to levy sufficient inspection fees for damages and apply the funds so raised to that purpose, it seems to us the legislature ought to say so. As the case stands, the legislature has, in effect, said exactly the contrary. It has said that bonds shall be taken with sureties from inspectors conditioned for the payment of damages to persons injured, and that the revenue raised from inspection fees shall be confined to the amount needed for the "necessary expenses" of the department. No bond is provided to indemnify the State in case it pays these damages. If it be our duty under the law to pay such damages out of fees collected, then the taking of bonds from inspectors for the protection of persons dealing with the department, is a mere idle ceremony, having, it seems, no purpose at all.

Such is the view the Commission were constrained to take of the law as it now stands; but they have made no formal ruling upon this claim, owing to the urgent representations made that a ruling of the kind above indicated would be injurious to the service. In this view your efficient Chief Inspector, Hon. P. Bird Price, seems from his report, which we print herewith, to concur. The claim of Franklin, Edson & Co. has therefore been referred to the Attorney General for his opinion upon the question as to whether the Commission has power under the statute to devote the funds of the inspection department to the payment of claims of this kind. We are daily expecting the opinion of the Attorney General upon that question, and had it been delivered before the time for our report to go into your hands, the necessity of mentioning this subject might possibly have been avoided, as the Commission would very cheerfully acquiesce in any construction the Attorney General of the State might give to the statute. Since, however, some action of the legislature may become necessary in case the opinion of the Attorney General should be adverse to the claim, we have thought proper to thus set forth the state of the law and our views thereon, in our report to your Excellency. When the Attorney General's opinion is received we will take measures to advise your Excellency and the General Assembly if thought necessary, as to the then status of the case, to the end that legislation may be had empowering the Commission to pay such claims

if they are deemed a legitimate expense of the inspection service, and are not, in the opinion of his honor, the Attorney General, already sufficiently provided for in the statute as it now stands.

#### TABULATED STATISTICS.

In the body of this report will be found seventeen tables which give tabulated information on the subjects indicated in their titles. These titles are as follows:

- Table I. Classification of Railroads and Mileage.
- Table II. A. Capital Stock, Bonds and Equipment Trust Obligations for Mileage Owned.
- Table II. B. Capital Stock, Funded Debt and Current Liabilities for Mileage Operated.
- Table III. Income Account, whole line.
- Table IV. Total Earnings from Operations in Illinois.
- Table V. Total Earnings and Income in Illinois.
- Table VI. Operating Expenses in Illinois.
- Table VII. Operating Expenses, Taxes and Average Earnings Per Mile of Road in Illinois.
- Table VIII. Passenger and Freight Traffic in Illinois.
- Table IX. Classified Freight Traffic in Illinois.
- Table X. Employes and Salaries, whole Line and in Illinois.
- Table XI. Average Daily Compensation of Employes.
- Table XII. Description of Equipment, whole line.
- Table XIII. Rails, Ties, Ballast, Bridges, etc., in Illinois.
- Table XIV. Consumption of Fuel by Locomotives, whole line.
- Table XV. Accidents in Illinois.
- Table XVI. Taxes Paid in Illinois in 1888, 1889 and 1890.
- Table XVII. Income Account Leased Lines, whole line.

Further along in this report will be found in full the tables above mentioned, a summary of which is as follows:

TABLE I. CLASSIFICATION OF RAILROADS AND MILEAGE.

The railway mileage in the state of Illinois on June 30, 1890, was as follows:

|                                       | Miles.    | Miles.    |
|---------------------------------------|-----------|-----------|
| Main line.....                        | 10,163.46 |           |
| Second, third and fourth tracks ..... | 925.77    |           |
| Sidings, etc .....                    | 2,928.34  |           |
| Total .....                           |           | 14,017.57 |

The following is a comparison with the mileage as reported for the year ending June 30, 1889:

| YEAR.                      | Main Line. | Second, third and fourth tracks. | Sidings, Etc. | Total.    |
|----------------------------|------------|----------------------------------|---------------|-----------|
| 1889.....                  | 9,936.63   | 755.67                           | 2,804.68      | 13,496.98 |
| 1890.....                  | 10,163.46  | 925.77                           | 2,928.34      | 14,017.57 |
| Increase .....             | 226.83     | 170.10                           | 123.66        | 520.59    |
| Per cent. of increase..... | 2.23       | 22.51                            | 4.41          | 3.78      |



The length of new road built during the year ending June 30, 1890, was 222.65 miles, an increase over the new road built during the period covered by our last report of 151.24 miles, or 212 per cent.

In this connection it may of interest to state that Illinois has the largest railway mileage of any state in the union. In the report of the Inter-State Commerce Commission for the year 1889, the proportion of the railway mileage in Illinois to the total mileage in the United States was 6.23 per cent., and the number of square miles per mile of railway was given as 5.76.

TABLE II-A. CAPITAL STOCK, BONDS AND EQUIPMENT TRUST OBLIGATIONS FOR MILEAGE OWNED.

This table shows the railway capital of the railroads in Illinois to be as follows:

|   |                  |                    |
|---|------------------|--------------------|
| Capital stock .....                               | \$847,488,296 90 |                    |
| Bonds .....                                       | 920,683,061 73   |                    |
| Equipment trust obligations.....                  | 1,440,505 41     |                    |
| Total.....  |                  | \$1,769,620,864 04 |
| Capital stock per mile of road.....               | \$25,573 37      |                    |
| Bonds per mile of road .....                      | 27,540 44        |                    |
| Equipment trust obligations per mile of road..... | 644 08           |                    |
| Total.....  |                  | 53,757 89          |

These figures shows an increase of railway capital over the report of last year of \$198,144,498.08.

This table also shows the number of stockholders in Illinois to be 1,399; number elsewhere, 30,398; and amount of stock held in Illinois, \$32,480,885.00, or 3.83 per cent. of the total capital stock.

TABLE II-B. CAPITAL STOCK, FUNDED DEBT AND CURRENT LIABILITIES FOR MILEAGE OPERATED.

This table shows the capital stock, funded debt and current liabilities for mileage *operated* to be as follows:

|   |                  |                    |
|---|------------------|--------------------|
| Capital stock.....                          | \$930,784,536 78 |                    |
| Funded debt.....                            | 997,407,939 64   |                    |
| Current liabilities .....                   | 27,505,798 37    |                    |
| Total .....                                 |                  | \$1,955,698,274 79 |
| Total amount per mile of road operated..... |                  | 52,783 18          |

As compared with last year these figures show a decrease in the current liabilities of \$2,092,484.65.

TABLE III. INCOME ACCOUNT—WHOLE LINE.

This table shows the following facts:

|                                     |                  |
|-------------------------------------|------------------|
| Gross earnings from operation ..... | \$262,091,753 14 |
| Operating expenses .....            | 170,329,077 53   |
| Income from operation .....         | 91,697,726 74    |
| Income from other sources .....     | 6,383,641 57     |
| Total income .....                  | 98,081,368 31    |
| Total deductions from income .....  | 59,868,907 44    |
| Net income (41 roads) .....         | 29,591,581 84    |
| Net deficit (21 roads) .....        | 1,384,172 13     |

This table also shows that during the year there were 12 operating railroad corporations paid dividends, amounting to \$19,127,823.20. In 1889, 11 corporations paid dividends amounting to \$16,978,464.66. The increase in the amount of dividends paid during 1890 over that of 1889, is \$2,149,358.54, or 12.66 per cent.

The following tables show the names of the operating railroads paying dividends, and the comparative rates and amounts paid during the years 1889 and 1890.

| Name of Company.                      | 1889.           | Percent.<br>on Com.<br>Stock. | Percent.<br>on Pref.<br>Stock. |
|---------------------------------------|-----------------|-------------------------------|--------------------------------|
| Chicago and Alton.....                | \$1,407,360 00  | 8                             | 8                              |
| Chicago and Eastern Illinois.....     | 267,912 00      | .....                         | 6                              |
| Chicago and Northwestern.....         | 3,444,504 00    | 7                             | 6                              |
| Chicago, Burlington and Quincy.....   | 3,055,684 00    | 4                             | .....                          |
| Chicago, Milwaukee and St. Paul.....  | 972,490 50      | .....                         | 4.5                            |
| Chicago, Rock Island and Pacific..... | 2,307,707 00    | 5                             | .....                          |
| Illinois Central.....                 | 2,200,000 00    | 5.5                           | .....                          |
| Lake Shore and Michigan Southern..... | 2,473,325 00    | 5                             | .....                          |
| Michigan Central.....                 | 749,528 16      | .....                         | 4                              |
| Rock Island and Peoria.....           | 75,000 00       | 5                             | .....                          |
| St. Louis, Alton and Terre Haute..... | 24,684 00       | .....                         | 1                              |
| Total.....                            | \$16,978,464 66 | .....                         | .....                          |

| Name of Company.                        | 1890.           | Percent.<br>on Com.<br>Stock. | Percent.<br>on Pref.<br>Stock. |
|---|-----------------|-------------------------------|--------------------------------|
| Chicago and Alton.....                  | \$1,407,728 00  | 8                             | 8                              |
| Chicago and Eastern Illinois.....       | 133,956 00      | .....                         | 3                              |
| Chicago and Northwestern.....           | 3,444,979 00    | 6                             | 7                              |
| Chicago, Burlington and Quincy.....     | 3,437,667 00    | 4.5                           | .....                          |
| Chicago, Milwaukee and St. Paul.....    | 1,296,829 00    | .....                         | 2.5                            |
| Chicago, Rock Island and Pacific.....   | 1,846,229 00    | 4                             | 3.5                            |
| Clev., Cin., Chicago and St. Louis..... | 1,320,000 00    | 4                             | 5                              |
| Illinois Central.....                   | 2,400,000 00    | 6                             | .....                          |
| Lake Erie and Western.....              | 355,200 00      | .....                         | 3                              |
| Lake Shore and Michigan Southern.....   | 2,473,325 00    | 5                             | .....                          |
| Michigan Central.....                   | 936,910 20      | 5                             | .....                          |
| Rock Island and Peoria.....             | 75,000 00       | 5                             | .....                          |
| Total.....                              | \$19,127,823 20 | .....                         | .....                          |

## LEASED OR SUBSIDIARY LINES PAYING DIVIDENDS.

In addition to the dividends paid by operating railroads, as shown in Table III., the following leased or subsidiary lines paid dividends during the year out of the net income from lease of road. See Table XVII.

| Name of Company.                       | Amount paid. | Rate per cent. on Com. Stock. | Rate per cent. on Pref. Stock. |
|--|--------------|-------------------------------|--------------------------------|
| Joliet and Chicago.....                | \$105,000 00 | 7                             | .....                          |
| Mississippi River Bridge .....         | 21,000 00    | 7                             | .....                          |
| Chicago and Western Indiana.....       | 150,000 00   | 3                             | .....                          |
| Peoria and Bureau Valley.....          | 135,000 00   | 10                            | .....                          |
| Joliet and Northern Indiana.....       | 24,000 00    | 8                             | .....                          |
| Pittsburgh, Ft. Wayne and Chicago..... | 2,240,146 00 | 7                             | 7                              |
| Belleville and Southern Illinois.....  | 92,437 50    | .....                         | 7¼                             |

Table III. also shows that the Centralia and Chester, Fulton County Narrow Gauge, and St. Louis and Peoria roads failed to earn enough to pay their operating expenses.

## TABLE IV. TOTAL EARNINGS FROM OPERATIONS IN ILLINOIS.

The total earnings from operation for the year are shown in the following table:

|  |                 |                 |
|--|-----------------|-----------------|
| Passenger department—                          |                 |                 |
| From passengers.....                           | \$14,211,044 93 |                 |
| From mails.....                                | 1,579,848 98    |                 |
| From express and extra baggage.....            | 1,479,541 07    |                 |
| From other sources.....                        | 193,431 79      |                 |
| Total.....                                     |                 | \$17,463,866 77 |
| Freight department—                            |                 |                 |
| From freights.....                             | \$43,856,706 08 |                 |
| From other sources.....                        | 276,891 23      |                 |
| Total.....                                     |                 | \$44,133,597 31 |
| From miscellaneous sources.....                |                 | 1,892,789 23    |
| Total earnings from operation in Illinois..... |                 | \$63,490,253 31 |

In the passenger department these figures show an increase of \$28,974.76 in the receipts from passengers; a decrease of \$35,994.93 in the receipts from mails; a decrease of \$38,892.30 in the receipts from express and baggage; an increase of \$15,093.27 in the receipts from other sources, or a net decrease in the passenger department of \$30,819.20 as compared with the business of last year.

In the freight department these figures show an increase over the business of last year of \$152,905.37 in the receipts from other sources; an increase of \$4,274,609.54 in the receipts from freights, or a net increase in the freight department of \$4,427,514.91.

The receipts from miscellaneous sources show a gain over the business of last year of \$364,076.23; the total increase in the earnings from operation in Illinois over the business of last year is \$4,760,771.97.

The following table shows the earnings of the passenger and freight departments in Illinois for the last four years:

|           | Passenger.      | Freight.        |
|-----------|-----------------|-----------------|
| 1887..... | \$15,385,945 66 | \$38,524,367 55 |
| 1888..... | 17,627,983 37   | 39,652,094 45   |
| 1889..... | 17,494,685 97   | 39,706,082 40   |
| 1890..... | 17,463,866 77   | 44,133,597 31   |

TABLE V. TOTAL EARNINGS AND INCOME IN ILLINOIS.

The total earnings and income in Illinois for the year are indicated in the following table:

|  |                 |
|--|-----------------|
| Total earnings from operation.....         | \$63,490,253 31 |
| Interest on bonds owned.....               | 482,365 60      |
| Dividends on stocks owned.....             | 323,582 68      |
| Miscellaneous income, less expense.....    | 1,175,293 22    |
| Total earnings and income in Illinois..... | \$65,471,494 81 |

This is an increase over the total earnings and income in Illinois of last year of \$2,301,398.62.

The following table shows the total income in Illinois for the last four years:

|           |                 |
|-----------|-----------------|
| 1887..... | \$56,860,287 34 |
| 1888..... | 61,333,515 45   |
| 1889..... | 63,170,096 19   |
| 1890..... | 65,471,494 81   |

TABLE VI. OPERATING EXPENSES IN ILLINOIS.

The operating expenses in Illinois for the year was \$40,059,-894.30, divided as follows:

|                                       | Chargeable to<br>Pas. Traffic. | Chargeable to<br>Frt. Traffic. |
|---------------------------------------|--------------------------------|--------------------------------|
| Maintenance of way and structure..... | \$2,990,609 62                 | \$5,452,657 91                 |
| Maintenance of equipment.....         | 1,811,827 79                   | 4,590,129 18                   |
| Conducting transportation.....        | 6,420,423 68                   | 11,497,094 27                  |
| General expenses.....                 | 1,614,385 31                   | 2,682,766 63                   |
| Total.....                            | \$12,837,246 31                | \$27,222,647 99                |

This is an increase in the operating expenses over last year of \$767,869.87, or less than 2 per cent.

The operating expenses in Illinois for the last four years are as follows:

|           |                 |
|-----------|-----------------|
| 1887..... | \$33,010,187 83 |
| 1888..... | 38,870,930 54   |
| 1889..... | 39,292,024 43   |
| 1890..... | 40,059,894 30   |

TABLE VII. OPERATING EXPENSES, TAXES AND AVERAGE EARNINGS PER MILE OF ROAD IN ILLINOIS.

This table shows the following facts:

|   |            |
|---|------------|
| Percentage of operating expenses to earnings.....   | 63.09      |
| Average passenger earnings per mile of road operated.....   | \$1,367 31 |
| Average passenger earnings per train mile.....  | 765        |
| Average freight earnings per mile of road operated.....   | 4,196 85   |
| Average freight earnings per train mile.....  | 1,418      |
| Average gross transportation earnings, including mail, express, baggage, etc., per mile of road operated..... | 6,062 73   |
| Average expenses per mile of road operated.....   | 3,825 37   |
| Net earnings per mile of road operated.....   | 2,237 41   |

Only those roads which have made complete detailed reports are taken into consideration in arriving at the above averages.

In last year's report certain average earnings, expenses, etc., per mile of road were given, and for the purpose of comparison with those of this year they are herewith repeated below:

|   |            |
|---|------------|
| Percentage of operating expenses to earnings.....   | 66.90      |
| Average passenger earnings per mile of road operated.....   | \$1,403 11 |
| Average passenger earnings per train mile.....  | 74         |
| Average freight earnings per mile of road operated.....   | 3,898 58   |
| Average freight earnings per train mile.....  | 1.37       |
| Average gross transportation earnings, including mail, express, baggage, etc., per mile of road operated..... | 5,784 46   |
| Average expenses per mile of road operated.....   | 3,870 70   |
| Net earnings per mile of road operated.....   | 1,913 76   |

TABLE VIII. PASSENGER AND FREIGHT TRAFFIC IN ILLINOIS.

The following important facts are shown in this table:

|  |               |
|--|---------------|
| <b>Passenger traffic—</b>                                    |               |
| Number of passengers carried earning revenue.....            | 24,910,820    |
| Number of passengers carried one mile.....                   | 554,960,062   |
| Average distance carried—miles.....                          | 25.12         |
| Average amount received from each passenger—cents.....       | 52.9          |
| Average receipts per passenger per mile—cents.....           | 2.066         |
| Estimated cost of carrying one passenger one mile—cents..... | 1.90          |
| <b>Freight traffic—</b>                                      |               |
| Number of tons carried earning revenue.....                  | 48,364,653    |
| Number of tons carried one mile.....                         | 4,271,377,794 |
| Average distance haul of one ton—miles.....                  | 102.45        |
| Average amount received for each ton—cents.....              | 85.23         |
| Average receipts per ton per mile—cents.....                 | 0.832         |
| Estimated cost of carrying one ton one mile—cents.....       | 0.517         |

Owing to the failure of several of the roads which do a large passenger and freight business to furnish the necessary data it is impossible to give estimates and averages which would apply



to all the roads in the State, and in arriving at the above averages and estimates only those roads which have made complete detailed reports are taken into consideration.

In this connection it may be interesting to show the passenger and freight traffic as reported in last year's report, and for the purpose of comparison with that of this year it is here given as follows:

|  |  |               |
|--|--|---------------|
| <b>Passenger traffic—</b>                                    |  |               |
| Number of passengers carried earning revenue.....            |  | 23,755,056    |
| Number of passengers carried one mile.....                   |  | 586,610,364   |
| Average distance carried—miles.....                          |  | 26.25         |
| Average amount received from each passenger—cents.....       |  | 53.5          |
| Average receipts per passenger per mile—cents.....           |  | 2.038         |
| Estimated cost of carrying one passenger one mile—cents..... |  | 1.721         |
| <b>Freight traffic—</b>                                      |  |               |
| Number of tons carried earning revenue.....                  |  | 44,931,095    |
| Number of tons carried one mile.....                         |  | 3,820,299,316 |
| Average distance haul of one ton—miles.....                  |  | 98.43         |
| Average amount received for each ton—cents.....              |  | 82.3          |
| Average receipts per ton per mile—cents.....                 |  | 0.836         |
| Estimated cost of carrying one ton one mile.....             |  | 0.513         |

TABLE IX. CLASSIFIED FREIGHT TRAFFIC IN ILLINOIS.

This table shows that the railroads carried in Illinois during the year 50,796,636 tons of freight, an increase over the business of last year of 3,857,507 tons, or 8.21 per cent.

The following is a classified comparison of the tonnage carried in Illinois in the years 1889 and 1890:

|                               | 1889.<br>Tons. | 1890.<br>Tons. |
|-------------------------------|----------------|----------------|
| Products of agriculture ..... | 9,985,424      | 11,006,271     |
| Products of animals.....      | 3,453,918      | 4,120,451      |
| Products of mines .....       | 14,360,114     | 14,944,966     |
| Lumber.....                   | 3,099,581      | 3,176,001      |
| Merchandise.....              | 3,749,310      | 3,189,436      |
| Manufactures.....             | 4,323,346      | 5,584,588      |
| Ice.....                      | 506,682        | 642,737        |
| Miscellaneous .....           | 7,460,754      | 8,132,186      |
| Totals .....                  | 46,939,129     | 50,796,636     |

TABLE X. EMPLOYÉS AND SALARIES, WHOLE LINE AND IN ILLINOIS.

This table shows that during the year there were 182,680 employés on the entire lines of the railroads doing business in Illinois, whose yearly compensation was \$107,705,205.49. It also shows that of the total number of employés there were in Illinois 57,435, whose aggregate yearly compensation was \$33,991,986.16.

Compared with last year these figures show an increase of 4,460 employés in Illinois, and an increase in the amount of compensation paid them of \$2,388,162.01.

The following table shows the division of the 182,680 employes above referred to:

|   |         |
|---|---------|
| General officers.....                     | 838     |
| General office clerks.....                | 5,526   |
| Station agents.....                       | 6,631   |
| Other station men.....                    | 17,768  |
| Engineers.....                            | 8,538   |
| Firemen.....                              | 8,829   |
| Conductors.....                           | 6,011   |
| Other train men.....                      | 13,035  |
| Machinists.....                           | 6,474   |
| Carpenters.....                           | 8,747   |
| Other shopmen.....                        | 24,155  |
| Section foremen.....                      | 7,480   |
| Other trackmen.....                       | 35,784  |
| Switchmen, flagmen and watchmen.....      | 10,561  |
| Telegraph operators and dispatchers.....  | 5,507   |
| Employes, account floating equipment..... | 413     |
| All other employes and laborers.....      | 16,383  |
| Total.....                                | 182,680 |

TABLE XI. AVERAGE DAILY COMPENSATION OF EMPLOYÉS.

This table shows the average daily compensation of the employes as enumerated in table X. An examination of the same will show that the compensation of the same class of employes varies widely on different roads.

TABLE XII. DESCRIPTION OF EQUIPMENT, WHOLE LINE.

Particular attention is called to this important table. In it will be found the number of locomotives owned by the roads classed as passenger, freight and switching; the number of cars owned, classed as cars in passenger, freight and company's service; the number of cars contributed to fast freight line service and the number of cars leased. It also shows what portion of the equipment is fitted with train brakes and automatic couplers. A summary of this table is as follows:

| CLASS OF EQUIPMENT.                   | Number. | Number fitted with train brake. | Number fitted with automatic coupler. |
|---------------------------------------|---------|---------------------------------|---------------------------------------|
| Locomotives—                          |         |                                 |                                       |
| Passenger.....                        | 1,746   | .....                           | .....                                 |
| Freight.....                          | 3,970   | .....                           | .....                                 |
| Switching.....                        | 1,240   | .....                           | .....                                 |
| Totals.....                           | 6,956   | 4,383                           | .....                                 |
| Cars—                                 |         |                                 |                                       |
| Passenger service.....                | 4,771   | 4,660                           | 4,494                                 |
| Freight service.....                  | 207,142 | 11,481                          | 16,549                                |
| Company's service.....                | 5,792   | 52                              | 9                                     |
| Fast freight line service.....        | 17,510  | 250                             | 1,102                                 |
| Totals.....                           | 235,215 | 16,443                          | 22,154                                |
| Total cars and locomotives owned..... | 242,171 | 20,826                          | 22,154                                |
| Cars and locomotives leased.....      | 19,125  | .....                           | .....                                 |
| Total equipment.....                  | 261,296 | 20,826                          | 22,154                                |

The foregoing shows the following facts in regard to safety appliances:

Of the locomotives 63 per cent. are equipped with train brakes, of the cars in passenger service 97.67 per cent. are equipped with train brakes, and 94.19 per cent. with automatic couplers; of the cars in freight service 5.54 per cent. are equipped with train brakes, and 7.99 per cent. with automatic couplers, and of cars in company's service less than one per cent. are equipped with safety appliances.

It would seem appropriate in this connection to show what kind of couplers are in use, and the number of each kind used. The following is such a statement:

| Style of Coupler.  | No.<br>used. |
|--------------------|--------------|
| Ames.....          | 647          |
| Ames-Janney.....   | 3,773        |
| Blackstone.....    | 132          |
| Cowell.....        | 190          |
| Dowling.....       | 60           |
| Gould.....         | 1,601        |
| Hinson.....        | 501          |
| Janney.....        | 10,345       |
| Janney-Miller..... | 21           |
| Keystone.....      | 10           |
| Loraine.....       | 10           |
| M. C. B.....       | 1,292        |
| McCree.....        | 158          |
| Miller.....        | 3,373        |
| Skinner.....       | 9            |
| Schroyer.....      | 18           |
| Thurmond.....      | 1            |
| Unclassified.....  | 13           |
| Total.....         | 22,154       |

TABLE XIII. RAILS, TIES, BALLAST, BRIDGES, ETC., IN ILLINOIS.

The following facts are shown in this table:

|  |           |
|--|-----------|
| Iron rails on road in Illinois, miles.....           | 1,181.27  |
| Steel rails on road in Illinois, miles.....          | 8,982.19  |
| Tons steel rails relaid during year in Illinois..... | 74,555.11 |
| Ties relaid during year in Illinois.....             | 3,112,780 |
| Number of stations in Illinois.....                  | 2,459     |
| Length of road unfenced in Illinois, miles.....      | 1,477.70  |
| Ballast in Illinois—                                 |           |
| Miles of stone.....                                  | 891.80    |
| Miles of sand or gravel.....                         | 4,412.08  |
| Miles of cinders.....                                | 560.64    |
| Miles of earth.....                                  | 4,043.83  |
| Miles of slag.....                                   | 81.83     |
| Unclassified.....                                    | 173.92    |
| Bridges in Illinois—                                 |           |
| Number of stone.....                                 | 1,020     |
| Number of iron.....                                  | 621       |
| Number of wooden.....                                | 1,399     |
| Number of combination.....                           | 148       |
| Trestles in Illinois—                                |           |
| Number.....  | 9,237     |
| Aggregate length in feet.....                        | 772,527   |

TABLE XIV. CONSUMPTION OF FUEL BY LOCOMOTIVES—WHOLE LINE.

This table gives a detailed statement of the fuel consumed by the different classes of locomotives, the number of miles run by such locomotives, and the average pounds consumed per mile. From it will be seen that the locomotives on the lines of the roads reporting this information consumed 9,556,663 tons of fuel in running 252,958,280 miles, or an average of 75.55 pounds per mile.

This table also shows that the cost of coal at distributing points ranged from 60 cents to \$2.75 per ton, and the cost of wood ranged from 91 cents to \$4 per cord.

TABLE XV. ACCIDENTS IN ILLINOIS.

A summary of this table, and a comparison of the same with the accidents as shown in last year's report, is as follows:

|                  | 1890.   |          | 1889.   |          |
|------------------|---------|----------|---------|----------|
|                  | Killed. | Injured. | Killed. | Injured. |
| Passengers ..... | 27      | 136      | 25      | 116      |
| Employes.....    | 176     | 1,059    | 172     | 1,188    |
| Others .....     | 365     | 369      | 360     | 402      |
| Totals .....     | 568     | 1,564    | 557     | 1,706    |

From the above it will be seen that during the year there was an increase of 11 in the number of persons killed, and a decrease in the number injured of 142.

The following is a division of the kind of accidents during the year:

|                                       | Killed. | Injured. |
|---------------------------------------|---------|----------|
| Coupling and uncoupling cars .....    | 39      | 433      |
| Falling from trains and engines ..... | 37      | 162      |
| Overhead obstructions.....            | 7       | 14       |
| Collisions .....                      | 17      | 95       |
| Derailements .....                    | 16      | 52       |
| Other train accidents.....            | 102     | 152      |
| At highway crossings.....             | 53      | 70       |
| At stations.....                      | 25      | 57       |
| Other causes .....                    | 272     | 529      |
| Totals .....                          | 568     | 1,564    |

TABLE XVI. TAXES PAID IN ILLINOIS IN 1888, 1889 AND 1890.

The amount of taxes paid by the railroads in Illinois during the year is shown by this table to be \$3,021,904.49, an increase over the amount paid last year of \$195,915.77. This table also gives a comparison of the taxes paid in Illinois in the years 1888, 1889 and 1890.

The following railroads making reports for the year ending June 30, 1890, were in the hands of receivers:

Chicago and Atlantic.

St. Louis and Chicago.

The Indianapolis, Decatur and Western Railway was in the hands of trustees.

For the above summary of statistics, together with the fuller tables printed elsewhere, we take occasion here to acknowledge our indebtedness to the untiring efficiency of our Secretary, Mr. James H. Paddock, whose labors during the past year have been invaluable to the Commission, and daily grow more efficient with his increasing experience. In the preparation of statistics, as well as in his other important labors, Mr. Paddock has been ably assisted by our stenographer, Mr. F. C. Dodds, to whom we also here make due acknowledgment.

#### APPROPRIATIONS.

It only remains to submit our financial statement, which will be found below. We have not, during the past year, been under the necessity of expending any of the funds appropriated for "suits and investigations," for counsel fees; and the unexpended balance of this fund, as indeed that of other funds, will be found to be somewhat larger than last year. From this it would not be safe to conclude that smaller appropriations for the next two years might safely be made. An emergency is liable at any time to arise which would require all, or more, than the amount that was appropriated by the last General Assembly. It has been sufficiently demonstrated that if more funds are appropriated than are needed the Commission may be safely trusted not to expend the surplus needlessly, simply because it is at hand, but will see that such surplus remains in the treasury and lapses unexpended at the time fixed by the statute. We therefore ask that appropriations be made for the use of the Commission in the same amount and for the same purposes, as those made by the last General Assembly.

In this connection we would add that in our judgment an additional appropriation, placed at our disposal, for the purpose of enabling us to employ at a liberal salary, a competent and experienced civil engineer to be designated as the "Consulting Engineer" of the Commission, would be an expenditure wisely made. There is enough work to keep an expert of this kind fully employed under the direction of the Commission. His chief business would be the inspection of railroads, bridges, viaducts and other structures, and through his labors a complete record of the physical condition of all structures and the progress of all betterments could be kept in the office of the Commission. Mr. Chas. Hansel, who has for the past year and a half sustained the relation of "Consulting Engineer" to the present Commissioners, and so designated by us, is, as explained in our last



report, not upon the Commissioners' pay-roll, but has been paid by the job for the work actually done under our direction. We think such an expert might with profit be added to the regular force of the office.

The financial statement above alluded to is as follows:

### FINANCIAL STATEMENT.

| OFFICE EXPENSES.                                   |            |            |
|--|------------|------------|
| Unexpended appropriation December 1, 1889.....     |            | \$3,309 31 |
| Appropriation for year ending June 30, 1891.....   |            | 4,000 00   |
| Total.....   |            | \$7,309 31 |
| Secretary's salary.....                            | \$1,500 00 |            |
| Janitor's salary.....                              | 600 00     |            |
| Printing and binding.....                          | 373 15     |            |
| Postage stamps.....                                | 100 00     |            |
| Railway periodicals, law books and newspapers..... | 46 05      |            |
| Express, freight and drayage.....                  | 180 56     |            |
| Telegraph.....                                     | 132 80     |            |
| Telephone.....                                     | 48 00      |            |
| Labor.....   | 8 00       |            |
| Stationery and typewriter supplies.....            | 34 60      |            |
| Furniture, repairs and supplies.....               | 81 65      |            |
| Ice.....   | 30 00      |            |
| Washing towels for office.....                     | 12 00      |            |
| Total.....   |            | \$3,146 81 |
| Unexpended balance December 3, 1890.....           |            | \$4,162 50 |
| SUITS AND INVESTIGATIONS.                          |            |            |
| Unexpended appropriation December 1, 1889.....     |            | \$4,512 88 |
| Appropriation for year ending June 30, 1891.....   |            | 5,000 00   |
| Total.....   |            | \$9,512 88 |
| Suits, investigations and expenses.....            | \$1,922 63 |            |
| Clerk hire and stenographer.....                   | 1,500 00   |            |
| Total.....   |            | 3,422 63   |
| Unexpended balance December 3, 1890.....           |            | \$6,090 25 |
| RAILROAD MAPS.                                     |            |            |
| Unexpended appropriation December 1, 1889.....     |            | \$1,200 00 |
| Appropriation for year ending June 30, 1891.....   |            | 1,200 00   |
| Total.....   |            | \$2,400 00 |
| Expended for maps.....                             | \$1,017 50 |            |
| Total.....   |            | 1,017 50   |
| Unexpended balance December 1, 1890.....           |            | \$1,382 50 |
| SCHEDULES AND CLASSIFICATION.                      |            |            |
| Unexpended appropriation December 1, 1890.....     |            | \$2,875 50 |

Respectfully submitted,

JOHN R. WHEELER,  
ISAAC N. PHILLIPS,  
W. L. CUM,  
*Commissioners.*

## STATISTICAL TABLES.

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### EXPLANATORY NOTES.

In the following statistical tables the principal operating road in an operating system and those which operate on their own account appear in alphabetical order; all subordinate roads are grouped under the roads to which they are leased or otherwise controlled, and are indented.

Chicago & Calumet Terminal — Embraces but one month's business—a switching business.

Chicago & Northern Pacific—Leased to the Wisconsin Central Company and the Wisconsin Central Railroad Company on April 1, 1890, and the operations, etc., are included in the report of the Wisconsin Central lines.

Chicago, Rock Island & Pacific—Report for the lines east of the Missouri river.

Grand Tower & Cape Girardeau — Report for the seven months ending June 30, 1890.

Ohio, Indiana & Western—Report for the six months ending December 31, 1889, at which time the road was sold under order of the U. S. Court and reorganized as the Peoria and Eastern Railway Company.

Pawnee—Report for the six months ending June 30, 1890.

Peoria & Eastern—Report for the six months ending June 30, 1890.

St. Louis & Chicago—Includes reports of the St. Louis & Chicago Railroad and the St. Louis & Chicago Railway.

St. Louis & Peoria — Report for the eight months ending June 30, 1890.

Terre Haute & Peoria—The mileage in Indiana is so small that no division of its accounts is kept as between Indiana and Illinois, and it has submitted its report of operations, etc., as being wholly within the State of Illinois.

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# COMPARATIVE TABLES.

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TABLE I.—*Classification of Railroads and*

|                  |                                   | 1   | 2                           |
|------------------|-----------------------------------|---|-----------------------------|
| NAME OF COMPANY. |                                   | DATE OF FILING<br>REPORT. (OPERAT-<br>ING OR FINAN-<br>CIAL.) | HOW OPERATED.               |
| 1                | Atchison, Topeka & Santa Fe *     | Dec. 8, 1890 O. & F.  | A. T. & S. Fe R. R. Co.     |
| 2                | Chicago, Santa Fe & California.   | Dec. 8, 1890 F.   | " "                         |
| 3                | Atch., Top. & Santa Fe in Chi.    | Dec. 8, 1890 F.   | " "                         |
| 4                | Miss. R. R. & Toll Bridge Co.     | Dec. 8, 1890 F.   | " "                         |
| 5                | Baltimore & Ohio                  | Nov. 21, 1890 O. & F.   | B. & O. R. R. Co.           |
| 6                | Baltimore & Ohio & Chicago.       | Nov. 21, 1890 F.  | " "                         |
| 7                | Belt Railway of Chicago           | Sept. 6, 1890 O. & F.   | Belt Ry. Co. of Chicago     |
| 8                | Centralla & Chester.              | Nov. 29, 1890 O. & F.   | C. & C. R. R. Co.           |
| 9                | Chicago & Alton                   | Sept. 17, 1890 O. & F.  | C. & A. R. R. Co.           |
| 10               | Joliet & Chicago.                 | Sept. 17, 1890 F.   | " "                         |
| 11               | Mississippi River Bridge Co.      | Sept. 17, 1890 F.   | " "                         |
| 12               | Chicago & Atlantic.               | Nov. 8, 1890 O. & F.  | Volney T. Malott, receiver. |
| 13               | Chicago & Calumet Terminal (6)    | Nov. 11, 1890 O. & F.   | C. & C. T. Ry. Co.          |
| 14               | Chicago & Eastern Illinois        | Sept. 17, 1890 O. & F.  | C. & E. I. R. R. Co.        |
| 15               | Chicago & Western Indiana.        | Sept. 6, 1890 F.  | " (2)                       |
| 16               | Evansville, Terre Haute & Chi.    | Oct. 13, 1890 F.  | C. & E. I. R. R. Co.        |
| 17               | Chicago & Grand Trunk.            | Sept. 15, 1890 O. & F.  | C. & G. T. Ry. Co.          |
| 18               | Grand Trunk Junction.             | Sept. 15, 1890 F.   | " "                         |
| 19               | Chicago & Illinois Southern       | Aug. 28, 1890 F.  | Danville Elevator Co.       |
| 20               | Chicago & Iowa                    | Oct. 31, 1890 O. & F.   | C. & I. R. R. Co.           |
| 21               | Chicago & Northwestern (1)        | Sept. 4, 1890 O. & F.   | C. & N. W. Ry. Co.          |
| 22               | Chicago & Northern Pacific        | Nov. 11, 1890 F.  | Northern Pacific R. R. Co.  |
| 23               | Chicago & Ohio River.             | Nov. 11, 1890 O. & F.   | C. & O. R. R. R. Co.        |
| 24               | Chicago, Burlington & Northern.   | Oct. 23, 1890 O. & F.   | C. B. & N. R. R. Co.        |
| 25               | Chicago, Burlington & Quincy      | Nov. 3, 1890 O. & F.  | C. B. & Q. R. R. Co.        |
| 26               | Galesburg & Rio                   | Nov. 3, 1890 F.   | " "                         |
| 27               | Illinois Valley & Northern.       | Nov. 3, 1890 F.   | " "                         |
| 28               | St. Louis, Rock Island & Chicago. | Nov. 3, 1890 F.   | " "                         |
| 29               | Chicago, Milwaukee & St. Paul     | Oct. 31, 1890 O. & F.   | C., M. & St. P. Ry. Co.     |
| 30               | Chicago, Peoria & St. Louis.      | Dec. 11, 1890 O. & F.   | C., P. & St. L. Ry. Co.     |
| 31               | Jacksonville Southeastern         | Dec. 11, 1890 F.  | " "                         |
| 32               | Litchfield, Carrollton & Western. | Dec. 11, 1890 F.  | " "                         |
| 33               | Louisville & St. Louis.           | Dec. 11, 1890 F.  | " "                         |
| 34               | Chicago, Rock Island & Pacific.   | Oct. 13, 1890 O. & F.   | C., R. I. & P. Ry. Co.      |
| 35               | Peoria & Bureau Valley            | Sept. 15, 1890 F.   | " "                         |
| 36               | Chicago, St. Louis & Pittsburgh.  | Oct. 2, 1890 O. & F.  | C., St. L. & P. R. R. Co.   |
| 37               | Englewood Connecting.             | Nov. 1, 1890 F.   | " "                         |
| 38               | Chicago, St. Paul & Kansas City.  | Sept. 8, 1890 O. & F.   | C., St. P. & K. C. Ry. Co.  |
| 39               | Cleveland, Cin., Chicago & St. L. | Oct. 24, 1890 O. & F.   | C. C. C. & St. L. Ry. Co.   |
| 40               | Cairo, Vincennes & Chicago.       | Oct. 24, 1890 O. & F.   | " "                         |
| 41               | Cin., Lafayette & Chicago.        | Oct. 24, 1890 O. & F.   | " "                         |
| 42               | Kankakee & Seneca                 | Oct. 24, 1890 O. & F.   | " "                         |
| 43               | Peoria & Eastern                  | Oct. 24, 1890 O. & F.   | " "                         |
| 44               | DePue, Ladd & Eastern (5)         | Nov. 5, 1890 F.   | C., B. & Q. R. R. Co.       |
| 45               | East St. Louis & Carondelet       | Sept. 29, 1890 O. & F.  | E. St. L. & Car. Ry. Co.    |
| 46               | East St. Louis Connecting.        | Oct. 6, 1890 O. & F.  | E. St. L. Con. Ry. Co.      |
| 47               | Electric City & Illin is.         | Oct. 5, 1890 F.   | Under construction          |
| 48               | Elgin, Joliet & Eastern.          | Nov. 17, 1890 O. & F.   | E., J. & E. Ry. Co.         |
| 49               | Gardner, Coal City & Northern.    | Nov. 17, 1890 F.  | " "                         |
| 50               | Waukegan & Southwestern           | Nov. 17, 1890 F.  | " "                         |
| 51               | Fulton County Narrow Gauge.       | Dec. 10, 1890 O. & F.   | F. C. N. G. Ry. Co.         |
| 52               | Fulton County Extension.          | Dec. 10, 1890 F.  | " "                         |
| 53               | Grand Tower & Carbondale.         | Nov. 8, 1890 O. & F.  | G. T. & C. R. R. Co.        |
| 54               | Grand Tower & Cape Girardeau.     | Nov. 18, 1890 O. & F.   | G. T. & C. G. R. R. Co.     |
| 55               | Illinois Central                  | Oct. 22, 1890 O. & F.   | I. C. R. R. Co.             |
| 56               | Chicago, Havana & Western.        | Oct. 22, 1890 F.  | " "                         |
| 57               | Chicago, Madison & Northern.      | Oct. 22, 1890 F.  | " "                         |
| 58               | Chicago & Springfield             | Oct. 22, 1890 F.  | " "                         |
| 59               | Dunleith & Dubuque Bridge Co.     | Oct. 22, 1890 F.  | " "                         |
| 60               | Kankakee & Southwestern.          | Oct. 22, 1890 F.  | " "                         |
| 61               | Mound City.                       | Oct. 22, 1890 F.  | " "                         |
| 62               | Rantoul                           | Oct. 22, 1890 F.  | " "                         |
| 63               | South Chicago.                    | Oct. 22, 1890 F.  | " "                         |
| 64               | St. Charles Air Line.             | Oct. 22, 1890 F.  | " "                         |
| 65               | Indiana & Illinois Southern.      | Dec. 10, 1890 O. & F.   | I. & I. S. R. R. Co.        |
| 66               | Indianapolis, Decatur & Western   | Nov. 17, 1890 O. & F.   | I. D. & W. Ry. Co.          |
| 67               | Indiana, Illinois & Iowa.         | Nov. 8, 1890 O. & F.  | I., I. & I. R. R. Co.       |
| 68               | Iowa Central.                     | Sept. 10, 1890 O. & F.  | Ia. Central Ry. Co.         |
| 69               | Keithsburg Bridge Co              | Oct. 22, 1890 F.  | " "                         |
| 70               | Peoria Terminal.                  | Oct. 22, 1890 F.  | " "                         |
| 71               | Lake Erie & Western.              | Sept. 26, 1890 O. & F.  | L. E. & W. R. R. Co.        |

*Mileage for year ending June 30, 1890.*

| 3                                      |              | 4                                  |              | 5  |  | 6  |           | 7  |  | 8 |  | 9 |    |
|--|--------------|------------------------------------|--------------|--|--|--|-----------|--|--|---|--|---|----|
| LENGTH OF LINE OPER-<br>ATED—IN MILES. |              | LENGTH OF LINE OWNED<br>—IN MILES. |              | Second,<br>third and<br>fourth<br>tracks in<br>Illinois. |  | Yard tracks,<br>sidings<br>and spurs in<br>Illinois. |           | New<br>road<br>built<br>during<br>year in<br>Illinois. |  |   |  |   |    |
| Whole Line.                            | In Illinois. | Whole Line.                        | In Illinois. |  |  |  |           |  |  |   |  |   |    |
| 515.27                                 | 294.79       |                                    |              |  |  |  |           |  |  |   |  |   | 1  |
|  |              | 490.97                             | 278.30       |  |  | 70.00  |           |  |  |   |  |   | 2  |
|  |              | 2.12                               | 2.12         |  |  | 35.88  |           |  |  |   |  |   | 3  |
|  |              | .61                                | .51          |  |  |  |           |  |  |   |  |   | 4  |
| 271.00                                 | 14.31        |                                    |              |  |  |  |           |  |  |   |  |   | 5  |
|  |              | 262.60                             | 5.91         | 5.90   |  | 21.55  |           |  |  |   |  |   | 6  |
| 21.31                                  | 21.31        |                                    |              |  |  |  |           |  |  |   |  |   | 7  |
| 8.00                                   | 8.00         | 8.00                               | 8.00         |  |  | .13  | 8.00      |  |  |   |  |   | 8  |
| 848.68                                 | 586.06       | 548.86                             | 548.86       | 41.03  |  | 122.77   |           |  |  |   |  |   | 9  |
|  |              | 37.20                              | 37.20        | 40.30  |  | 33.01  |           |  |  |   |  |   | 10 |
|  |              | 1.30                               | .68          |  |  |  |           |  |  |   |  |   | 11 |
| 268.40                                 | 19.90        |                                    |              |  |  |  |           |  |  |   |  |   | 12 |
| 32.00                                  | 27.00        | 32.00                              | 27.00        |  |  | 4.00   | 19.71     |  |  |   |  |   | 13 |
| 435.75                                 | 202.55       | 351.46                             | 180.08       | 32.92  |  | 69.59  |           |  |  |   |  |   | 14 |
|  |              | 48.58                              | 48.58        | 59.61  |  | 57.99  |           |  |  |   |  |   | 15 |
|  |              | 48.58                              | 5.48         |  |  |  |           |  |  |   |  |   | 16 |
| 335.27                                 | 30.65        | 326.59                             | 21.88        |  |  | 16.40  |           |  |  |   |  |   | 17 |
|  |              | 3.90                               | 3.90         | 3.90   |  | 17.25  |           |  |  |   |  |   | 18 |
|  |              | .41                                | .41          |  |  |  |           |  |  |   |  |   | 19 |
| 104.00                                 | 104.00       | 104.00                             | 104.00       |  |  | 20.00  |           |  |  |   |  |   | 20 |
| 4,254.92                               | 586.28       | 4,258.38                           | 594.28       | 158.41   |  | 246.33   | 8.00      |  |  |   |  |   | 21 |
| 18.07                                  | 18.07        | 18.07                              | 18.07        | 14.73  |  | 30.72  |           |  |  |   |  |   | 22 |
| 86.00                                  | 86.00        | 86.00                              | 86.00        |  |  | 5.24   |           |  |  |   |  |   | 23 |
| 371.11                                 | 110.18       | 349.17                             | 93.57        |  |  | 17.35  |           |  |  |   |  |   | 24 |
| 5,138.82                               | 1,230.71     | 4,663.33                           | 847.05       | 222.56   |  | 312.02   |           |  |  |   |  |   | 25 |
|  |              | 12.45                              | 12.45        |  |  | .65  |           |  |  |   |  |   | 26 |
|  |              | 58.74                              | 58.74        |  |  | 7.22   |           |  |  |   |  |   | 27 |
|  |              | 283.82                             | 283.82       |  |  | 58.28  |           |  |  |   |  |   | 28 |
| 5,685.92                               | 339.15       | 5,656.83                           | 318.08       | 28.03  |  | 163.64   | (7) 28.00 |  |  |   |  |   | 29 |
| 315.20                                 | 315.20       | 118.10                             | 146.10       |  |  | 10.55  |           |  |  |   |  |   | 30 |
|  |              | 112.30                             | 112.30       |  |  | 6.30   |           |  |  |   |  |   | 31 |
|  |              | 51.60                              | 51.60        |  |  | 1.56   |           |  |  |   |  |   | 32 |
|  |              | 16.40                              | 16.40        |  |  | .76  |           |  |  |   |  |   | 33 |
| 3,354.98                               | 236.40       | 1,185.80                           | 189.70       | 168.10   |  | 125.20   |           |  |  |   |  |   | 34 |
|  |              | 46.70                              | 46.70        |  |  | 10.70  |           |  |  |   |  |   | 35 |
| 636.05                                 | 28.00        | 580.52                             | 28.00        | 11.73  |  | 38.40  |           |  |  |   |  |   | 36 |
| 2.35                                   | 2.35         | 2.35                               | 2.35         |  |  | .73  | 2.35      |  |  |   |  |   | 37 |
| 862.68                                 | 172.16       | 815.67                             | 146.73       |  |  | 18.19  |           |  |  |   |  |   | 38 |
| 1,296.90                               | 477.70       | 761.30                             |              |  |  |  |           |  |  |   |  |   | 39 |
|  |              | 267.00                             | 261.00       | 2.75   |  | 117.63   |           |  |  |   |  |   | 40 |
|  |              | 56.30                              | 29.30        |  |  |  |           |  |  |   |  |   | 41 |
| 42.08                                  | 42.08        | 42.08                              | 42.08        |  |  | 5.39   |           |  |  |   |  |   | 42 |
| 350.45                                 | 131.52       | 341.43                             | 122.50       |  |  | 27.11  |           |  |  |   |  |   | 43 |
|  |              | 3.50                               | 3.50         |  |  | .50  | 3.50      |  |  |   |  |   | 44 |
| 12.01                                  | 12.01        | 12.01                              | 12.01        |  |  | 4.38   |           |  |  |   |  |   | 45 |
| 9.20                                   | 9.20         | 1.80                               | 1.80         |  |  | 8.80   |           |  |  |   |  |   | 46 |
|  |              | 1.50                               | 1.50         |  |  |  | 1.50      |  |  |   |  |   | 47 |
| 172.28                                 | 150.98       | 103.10                             | 81.80        |  |  | 22.60  |           |  |  |   |  |   | 48 |
|  |              | 33.58                              | 33.58        |  |  | 7.54   |           |  |  |   |  |   | 49 |
|  |              | 35.60                              | 35.60        |  |  | 5.40   | 35.60     |  |  |   |  |   | 50 |
| 61.00                                  | 61.00        | 31.00                              | 31.00        |  |  | 2.40   |           |  |  |   |  |   | 51 |
|  |              | 30.00                              | 30.00        |  |  | .61  |           |  |  |   |  |   | 52 |
| 32.90                                  | 32.90        | 26.20                              | 26.20        |  |  | 6.00   |           |  |  |   |  |   | 53 |
| 28.80                                  | 28.80        | 28.80                              | 28.80        |  |  | 2.00   | 28.80     |  |  |   |  |   | 54 |
| 2,279.22                               | 1,285.28     | 1,609.43                           | 705.50       | 111.75   |  | 197.99   |           |  |  |   |  |   | 55 |
|  |              | 131.62                             | 131.62       |  |  | 12.10  |           |  |  |   |  |   | 56 |
|  |              | 222.14                             | 130.83       |  |  | 29.14  |           |  |  |   |  |   | 57 |
|  |              | 111.47                             | 111.47       |  |  | 17.76  |           |  |  |   |  |   | 58 |
|  |              | .59                                | .17          |  |  |  |           |  |  |   |  |   | 59 |
|  |              | 131.26                             | 131.26       |  |  | 12.99  |           |  |  |   |  |   | 60 |
|  |              | 2.87                               | 2.87         |  |  |  |           |  |  |   |  |   | 61 |
|  |              | 74.43                              | 66.21        |  |  | 4.51   |           |  |  |   |  |   | 62 |
|  |              | 4.76                               | 4.76         | 4.76   |  | 3.22   |           |  |  |   |  |   | 63 |
|  |              | .76                                | .76          | .76  |  |  |           |  |  |   |  |   | 64 |
| 90.00                                  | 56.00        | 90.00                              | 56.00        |  |  | 2.00   |           |  |  |   |  |   | 65 |
| 152.51                                 | 75.76        | 152.51                             | 75.76        |  |  | 7.93   |           |  |  |   |  |   | 66 |
| 169.09                                 | 68.95        | 118.19                             | 68.95        |  |  | 8.13   |           |  |  |   |  |   | 67 |
| 488.39                                 | 93.25        | 503.02                             | 88.65        |  |  | 11.90  |           |  |  |   |  |   | 68 |
|  |              | 2.57                               | 1.10         |  |  |  |           |  |  |   |  |   | 69 |
|  |              | 4.00                               | 4.00         |  |  |  |           |  |  |   |  |   | 70 |
| 585.84                                 | 121.02       | 582.07                             | 118.60       |  |  | 17.56  |           |  |  |   |  |   | 71 |



Table I—

| NAME OF COMPANY.                             | DATE OF FILING<br>REPORT. (OPERAT-<br>ING OR FINAN-<br>CIAL.) | HOW OPERATED.                     |
|--|---|-----------------------------------|
|  |   |                                   |
| 72 Lake Shore & Michigan Southern .....      | Sept. 13, 1890 O. & F.  | L. S. & M. S. Ry. Co. ....        |
| 73 Liverpool Coal. ....                      | Oct. 7, 1890  | Used as switch, C., B. & Q. R.R.  |
| 74 Louisville & Nashville .....              | Oct. 27, 1890 O. & F.   | L. & N. R. R. Co. ....            |
| 75 Southeast and St. Louis .....             | Oct. 27, 1890 F.  | "                                 |
| 76 Louisville, Evansville & St. L. Con. .... | Oct. 31, 1890 O. & F.   | L., E. & St. L. Con. R. R. Co..   |
| 77 Louisville, New Albany & Chicago. ....    | Dec. 12, 1890 O. & F.   | L., N. A. & C. Ry. Co. ....       |
| 78 Michigan Central .....                    | Sept. 19, 1890 O. & F.  | M. C. R. R. Co. ....              |
| 79 Joliet & Northern Indiana .....           | Oct. 6, 1890 F.   | "                                 |
| 80 Mobile & Ohio .....                       | Sept. 5, 1890 O. & F.   | M. & O. R. R. Co. ....            |
| 81 St. Louis & Cairo .....                   | Sept. 5, 1890 F.  | "                                 |
| 82 Nat'l Stock Yards Co. (East St. L.) ..... | Nov. 12, 1890   | Used as switch                    |
| 83 New York, Chicago & St. Louis .....       | Oct. 2, 1890 O. & F.  | N. Y., C. & St. L. R. R. Co. .... |
| 84 Chicago & State Line .....                | Sept. 24, 1890 F.   | "                                 |
| 85 Ohio & Mississippi .....                  | Oct. 7, 1890 O. & F.  | O. & M. Ry. Co. ....              |
| 86 Ohio, Indiana & Western .....             | Nov. 1, 1890 O. & F.  | O., I. & W. Ry. Co. ....          |
| 87 Pawnee .....                              | Dec. 9, 1890 O. & F.  | P. R. R. Co. ....                 |
| 88 Pennsylvania Co .....                     | Oct. 2, 1890  | Penn. Company .....               |
| 89 Calumet River .....                       | Nov. 1, 1890 F.   | "                                 |
| 90 Pittsburgh, Ft. Wayne & Chicago .....     | Oct. 24, 1890 O. & F.   | "                                 |
| 91 South Chicago & Southern .....            | Oct. 15, 1890 O. & F.   | "                                 |
| 92 Peoria & Pekin Union .....                | Dec. 13, 1890 O. & F.   | P. & P. U. Ry. Co. ....           |
| 93 Peoria, Decatur & Evansville .....        | Oct. 31, 1890 O. & F.   | P., D. & E. Ry. Co. ....          |
| 94 Quincy, Omaha & Kansas City .....         | Nov. 12, 1890 O. & F.   | Q., O. & K. C. Ry. Co. ....       |
| 95 Rock Island & Peoria .....                | Oct. 9, 1890 O. & F.  | R. I. & P. Ry. Co. ....           |
| 96 St. Louis, Alton & Springfield .....      | Dec. 6, 1890 O. & F.  | St. L., A. & S. R. R. Co. ....    |
| 97 Alton Terminal .....                      | "   | "                                 |
| 98 St. Louis, Alton & Terre Haute .....      | Sept. 22, 1890 O. & F.  | St. L., A. & T. H. R. R. Co. .... |
| 99 Belleville & Carondelet .....             | Oct. 21, 1890 F.  | "                                 |
| 100 Belleville & Eldorado .....              | Oct. 21, 1890 F.  | "                                 |
| 101 Belleville & Southern Illinois .....     | Oct. 21, 1890 F.  | "                                 |
| 102 Chicago, St. Louis & Paducah .....       | Oct. 21, 1890 F.  | "                                 |
| 103 St. Louis Southern .....                 | Oct. 17, 1890 F.  | "                                 |
| 104 Carbondale & Shawneetown .....           | Oct. 17, 1890 F.  | "                                 |
| 105 St. Louis & Chicago .....                | Nov. 14, 1890 O. & F.   | R. J. Cavett, receiver. ....      |
| 106 St. Louis & Peoria .....                 | Nov. 25, 1890 O. & F.   | St. L. & P. R. R. Co. ....        |
| 107 Terminal R. R. Ass'n of St. Louis .....  | Oct. 21, 1890 O. & F.   | T. R. R. Ass'n of St. Louis. .... |
| 108 Terre Haute & Indianapolis .....         | Oct. 22, 1890 O. & F.   | T. H. & I. R. R. Co. ....         |
| 109 St. Louis, Vandalia & Terre Haute .....  | Nov. 13, 1890 F.  | "                                 |
| 110 Terre Haute & Peoria .....               | Nov. 13, 1890 O. & F.   | T. H. & P. R. R. Co. ....         |
| 111 Toledo, Peoria & Western .....           | Sept. 6, 1890 O. & F.   | T., P. & W. Ry. Co. ....          |
| 112 Toledo, St. Louis & Kansas City .....    | Nov. 14, 1890 O. & F.   | T., St. L. & K. C. R. R. Co. .... |
| 113 Union Stock Yards & Transit Co. ....     | July 11, 1890   | For switching cars to Stock Yds.  |
| 114 Wabash .....                             | Sept. 13, 1890 O. & F.  | Wabash R. R. Co. ....             |
| 115 Wabash, Chester & Western .....          | Sept. 1, 1890 O. & F.   | W., C. & W. R. R. Co. ....        |
| 116 Wisconsin Central Lines .....            | Sept. 25, 1890 O. & F.  | (4) Wisconsin Central Lines ....  |
| 117 Chicago & Wisconsin .....                | Sept. 25, 1890 F.   | "                                 |
| Total .....                                  |   |                                   |

(1). Includes 8 miles Junction Railway, not yet in operation.

(2). Operated by C. &amp; E. I., Wabash, C. &amp; Atlantic, C. &amp; G. T., L., N. A. &amp; C., A., T. &amp; S. Fe and Belt.

(3). Includes mileage of Champaign &amp; Sidney R. R.—11.70 miles belonging to Purchasing Committee.

(4). From April 1, 1890, operated by Northern Pacific R. R. Co.

(5). Owned by Chicago, Wilmington &amp; Vermilion Coal Co., and connects mines with C., B. &amp; Q. R. R.

(6). Operated one month prior to June 30, 1890.

(7). Still in hands of contractor.

(8). Not yet in operation.

(9). Unofficial.

Continued.

| 3                                      | 4            | 5                                  | 6            | 7  | 8  | 9  |     |
|--|--------------|------------------------------------|--------------|--|--|--|-----|
| LENGTH OF LINE OPER-<br>ATED—IN MILES. |              | LENGTH OF LINE OWNED<br>—IN MILES. |              | Second,<br>third and<br>fourth<br>tracks in<br>Illinois. | Yard tracks,<br>sidings<br>and spurs in<br>Illinois. | New<br>road<br>built<br>during<br>year in<br>Illinois. |     |
| Whole Line.                            | In Illinois. | Whole Line.                        | In Illinois. |  |  |  |     |
| 1,445.36                               | 14.02        | 1,086.82                           | 14.02        | 14.02  | 55.23  |  | 72  |
|  |              | 2.50                               | 2.50         |  | .50  |  | 73  |
| 208.00                                 | 179.97       |                                    |              |  |  |  | 74  |
|  |              | 208.00                             | 179.97       |  | 40.07  |  | 75  |
| (9) 296.74                             | 93.80        | (9) 297.51                         | 163.53       |  | 17.62  | (8) 64.35  | 76  |
| 537.07                                 | 19.86        | 510.46                             |              |  |  |  | 77  |
| 1,608.27                               | 49.07        | 270.07                             | 6.07         | 6.07   | 40.65  |  | 78  |
|  |              | 45.00                              | 29.00        |  | 16.92  |  | 79  |
| 160.60                                 | 160.60       |                                    |              |  |  |  | 80  |
|  |              | 160.60                             | 160.60       |  | 36.27  |  | 81  |
|  |              |                                    |              |  | 15.00  |  | 82  |
| 523.02                                 | 18.86        | 502.56                             |              |  |  |  | 83  |
|  |              | 9.96                               | 9.96         | 1.31   | 17.29  |  | 84  |
| 628.48                                 | 375.52       | 628.48                             | 375.52       |  | 61.94  |  | 85  |
| 350.45                                 | 131.52       |                                    |              |  |  |  | 86  |
| 6.61                                   | 6.61         | 4.11                               | 4.11         |  | .50  | 4.11   | 87  |
| 480.14                                 | 26.57        |                                    |              |  |  |  | 88  |
|  |              | 4.43                               | 4.43         |  |  | 4.43   | 89  |
|  |              | 469.89                             | 16.32        | 14.34  | 41.50  |  | 90  |
|  |              | 10.25                              | 10.25        |  | 1.52   |  | 91  |
| 18.01                                  | 18.01        | 18.01                              | 18.01        | 2.00   | 33.80  |  | 92  |
| 256.63                                 | 213.25       | 233.28                             | 192.92       |  | 25.28  |  | 93  |
| 137.53                                 | 2.02         | 134.51                             |              |  |  |  | 94  |
| 113.00                                 | 113.00       | 113.00                             | 113.00       |  | 11.98  |  | 95  |
| 96.00                                  | 96.00        | 81.00                              | 81.00        |  | 18.16  |  | 96  |
|  |              | 2.00                               | 2.00         |  |  |  | 97  |
| 239.04                                 | 239.04       | 207.40                             | 198.40       |  | 13.30  |  | 98  |
|  |              | 17.20                              | 17.20        |  | 2.78   |  | 99  |
|  |              | 50.20                              | 50.20        |  | 3.40   |  | 100 |
|  |              | 56.40                              | 56.40        |  | 11.10  |  | 101 |
|  |              | 53.50                              | 53.50        |  | 7.10   |  | 102 |
|  |              | 29.74                              | 29.74        |  | 3.89   |  | 103 |
|  |              | 17.50                              | 17.50        |  | .50  |  | 104 |
| 52.75                                  | 52.75        | 51.25                              | 51.25        |  | 3.97   |  | 105 |
| 14.00                                  | 14.00        | 14.00                              | 14.00        |  | 1.00   | 14.00  | 106 |
| 3.20                                   | 1.88         | 3.20                               | 1.88         | .79  | 10.85  |  | 107 |
| 158.30                                 | 158.30       |                                    |              |  |  |  | 108 |
|  |              | 158.30                             | 158.30       |  | 46.11  |  | 109 |
| 172.89                                 | 165.94       | 144.74                             | 144.74       |  | 13.07  |  | 110 |
| 247.10                                 | 247.10       | 230.10                             | 230.10       |  | 36.10  |  | 111 |
| 450.72                                 | 179.49       | 450.72                             | 179.49       |  | 23.90  |  | 112 |
|  |              | 50.00                              | 50.00        |  | 85.00  |  | 113 |
| 1,921.00                               | 731.00       | 1,443.40                           | (3) 671.30   |  | 163.20   |  | 114 |
| 42.26                                  | 42.26        | 42.26                              | 42.26        |  | 2.88   |  | 115 |
| 867.06                                 | 60.26        | 233.37                             |              |  |  |  | 116 |
|  |              | 49.36                              | 49.36        |  | 7.96   |  | 117 |
|  |              |                                    | 10,163.46    | 925.77   | 2,928.34   | 222.65   |     |

TABLE II, A.—*Capital Stock, Bonds and Equipment Trust*  
*Ending June*

| NAME OF COMPANY.                              | CAPITAL STOCK.        |                          | BONDS.              |                          |
|---|-----------------------|--------------------------|---------------------|--------------------------|
|   | Amount outstanding.   | Amount per mile of road. | Amount outstanding. | Amount per mile of road. |
|   |                       |                          |                     |                          |
| 1 Atchison, Topeka & Santa Fe .....           | \$15,000,000 00       | \$30,551 76              | \$17,583,000 00     | \$35,812 78              |
| 2 Chicago, Santa Fe & California .....        | 5,000,000 00          | 2,463,054 18             | 6,773,000 00        | 3,336,453 20             |
| 3 Atch., Top. & Santa Fe in Chgo. ....        | 1,000,000 00          | 1,639,344 00             | 650,000 00          | 1,065,574 00             |
| 4 Miss. River R. R. & Toll Brdg. Co. ....     |                       |                          |                     |                          |
| 5 Baltimore & Ohio (4) .....                  | 1,503,450 00          | 5,725 25                 | 7,744,000 00        | 29,489 72                |
| 6 Baltimore & Ohio & Chicago .....            | 17,594,500 00         | 32,056 44                | 10,360,950 00       | 18,877 21                |
| 9 Chicago & Alton .....                       | 1,500,000 00          | 40,322 58                |                     |                          |
| 10 Joliet & Chicago .....                     | 300,000 00            | 230,769 23               | 626,000 00          | 481,538 46               |
| 11 Mississippi River Bridge Co. ....          | In hands of Receiver. |                          |                     |                          |
| 12 Chicago & Atlantic .....                   | 5,000,000 00          | 156,250 00               | 1,752,000 00        | 54,750 00                |
| 13 Chicago & Calumet Terminal .....           | 10,663,000 00         | 30,339 15                | 14,273,000 00       | 40,610 59                |
| 14 Chicago & Eastern Illinois .....           | 5,000,000 00          | 102,923 01               | 8,592,666 67        | 176,876 63               |
| 15 Chicago & Western Indiana .....            | 581,370 00            | 11,967 27                | 1,250,000 00        | 25,730 75                |
| 16 Evansville, Terre Haute & Chgo. ....       | 6,600,000 00          | 20,214 40                | 12,000,000 00       | 36,753 44                |
| 17 Chicago & Grand Trunk .....                | 500,000 00            | 128,205 13               | 3,291,200 00        | 843,897 43               |
| 18 Grand Trunk Junction .....                 | 500 00                |                          |                     |                          |
| 19 Chicago & Illinois Southern .....          |                       |                          |                     |                          |
| 20 Chicago & Iowa .....                       | 1,428,000 00          | 13,730 70                | 2,150,000 00        | 20,673 00                |
| 21 Chicago & Northwestern .....               | 66,282,820 53         | 15,594 56                | 104,985,500 00      | 24,700 26                |
| 22 Chicago & Northern Pacific .....           | 30,000,000 00         | 1,660,210 29             | 19,549,000 00       | 1,081,848 37             |
| 23 Chicago & Ohio River .....                 | 438,800 00            | 5,102 32                 | 868,300 00          | 10,096 51                |
| 24 Chicago, Burlington & Northern .....       | 9,289,500 00          | 26,604 52                | 12,800,500 00       | 36,659 79                |
| 25 Chicago, Burlington & Quincy .....         | 76,394,505 00         | 16,381 96                | (2) 106,319,288 70  | 22,799 00                |
| 26 Galesburg and Rio .....                    | 240,000 00            | 19,656 01                | 243,900 00          | 19,967 23                |
| 27 Illinois Valley & Northern .....           | 1,500,000 00          | 25,536 26                | 1,163,200 00        | 19,802 51                |
| 28 St. Louis, Rock Island & Chicago .....     | 3,000,000 00          | 10,570 07                | 2,500,000 00        | 8,808 39                 |
| 29 Chicago, Milwaukee & St. Paul .....        | 61,708,861 00         | 10,908 73                | 125,693,000 00      | 22,219 69                |
| 30 Chicago, Peoria & St. Louis .....          | 2,500,000 00          | 21,168 50                | 2,095,000 00        | 17,739 20                |
| 31 Jacksonville Southeastern .....            | 1,000,000 00          | 8,904 71                 | 1,420,000 00        | 12,644 70                |
| 32 Litchfield, Carrollton & Western .....     | 598,800 00            | 11,604 65                | 422,000 00          | 8,178 29                 |
| 33 Louisville & St. Louis .....               | 1,000,000 00          | 60,975 60                | 247,000 00          | 15,060 97                |
| 34 Chicago, Rock Island & Pacific .....       | 46,156,000 00         | 38,923 93                | 21,500,000 00       | 18,131 22                |
| 35 Peoria & Bureau Valley .....               | 1,500,000 00          | 32,120 00                |                     |                          |
| 36 Chicago, St. Louis & Pittsburg .....       | 26,748,044 87         | 46,076 01                | 19,585,300 00       | 33,737 51                |
| 37 Englewood Connecting .....                 | 98,500 00             | 41,914 89                |                     |                          |
| 38 Chicago, St. Paul & Kansas City .....      | 14,892,900 00         | 18,258 50                | 30,108,750 00       | 36,912 90                |
| 39 Cleveland, Cine., Chicago & St. L. ....    | 30,500,000 00         | 28,131 34                | 26,963,750 00       | 24,869 71                |
| 40 Kankakee & Seneca .....                    | 10,000 00             | 237 64                   | 650 000 00          | 15,446 76                |
| 41 Peoria & Eastern .....                     | 10,000,000 00         | 29,288 58                | 13,430,000 00       | 39,334 56                |
| 42 DePue, Ladd & Eastern .....                | 30,000 00             | 8,571 42                 |                     |                          |
| 43 East St. Louis & Carondelet .....          | 420,000 00            | 34,970 85                | 200,000 00          | 16,652 78                |
| 44 East St. Louis Connecting .....            | 20,000 00             | 11,111 10                |                     |                          |
| 45 Electric City & Illinois (under con.) ..   | 2,500 00              |                          |                     |                          |
| 46 Elgin, Joliet & Eastern .....              | 4,000,000 00          | 40,399 96                | 3,427,000 00        | 34,612 66                |
| 47 Gardner, Coal City & Northern .....        | 1,000,000 00          | 31,328 32                | 850,000 00          | 26,629 07                |
| 48 Waukegan & Southwestern .....              | 1,000,000 00          | 28,089 89                | 850,000 00          | 23,876 40                |
| 49 Fulton County Narrow Gauge .....           | 375,515.77            | 12,113 41                | 171,000 00          | 5,516 12                 |
| 50 Fulton County Extension .....              | 260,900 00            | 8,696 66                 | 313,000 00          | 10,433 33                |
| 51 Grand Tower & Carbondale .....             | 50,000 00             | 1,908 39                 |                     |                          |
| 52 Grand Tower & Cape Girardeau .....         | 350,000 00            | 12,152 77                | 350,000 00          | 12,152 77                |
| 53 Illinois Central .....                     | 40,000,000 00         | 24,853 52                | 34,084,000 00       | 21,177 68                |
| 54 Chicago, Madison & Northern .....          |                       |                          | 2,500,000 00        | 11,251 16                |
| 55 South Chicago .....                        |                       |                          | 200,000 00          | 42,016 80                |
| 56 Indiana & Illinois Southern .....          | 1,400,000 00          | 15,555 00                | 1,239,000 00        | 13,766 00                |
| 57 Indianapolis, Decatur & Western .....      | 1,000,000 00          | 6,577 37                 | 4,218,950 00        | 31,599 70                |
| 58 Indiana, Illinois & Iowa .....             | 3,597,800 00          | 30,440 81                | 1,246,000 00        | 10,542 34                |
| 59 Iowa Central .....                         | 13,479,503 44         | 26,796 88                | 5,916,956 21        | 11,762 74                |
| 60 Lake Erie & Western .....                  | 23,680,000 00         | 40,682 00                | 5,920,000 00        | 10,171 00                |
| 61 Lake Shore & Michigan Southern .....       | 50,000,000 00         | 58,197 05                | 46,266,000 00       | 45,393 52                |
| 62 Liverpool Coal .....                       | 25,000 00             | 10,000 00                |                     |                          |
| 63 Louisville & Nashville (4) .....           |                       |                          |                     |                          |
| 64 Southeast & St. Louis .....                | 1,000,000 00          | 4,807 69                 | 6,500,000 00        | 31,249 98                |
| 65 Louisville, Evansville & St. L., Con. .... | 5,086,000 00          | 14,154 54                | 7,890,375 00        | 21,959 19                |
| 66 Louisville, New Albany & Chicago .....     | 5,900,000 00          | 11,558 20                | 10,000,000 00       | 19,599 17                |
| 67 Michigan Central .....                     | 18,738,204 00         | 69,382 77                | 10,000,000 00       | 37,027 43                |

*Obligations for Mileage Owned—Whole Line—for year  
30, 1890.*

| 5                               | 6                              | 7  | 8                                    | 9  | 10              | 11   |    |
|---------------------------------|--------------------------------|--|--------------------------------------|--|-----------------|--|----|
| EQUIPMENT TRUST<br>OBLIGATIONS. |                                | SUMMARY.   |                                      | No. of stock-<br>holders in Illi-<br>nois..... | No. elsewhere.. | Amount<br>of stock<br>held in<br>Illinois. |    |
| Amount<br>outstanding.          | Amount<br>per mile<br>of road. | Total Capital<br>Stock, Bonds and<br>Equipment Trust<br>Obligations. | Total<br>amount per<br>mile of road. |  |                 |  |    |
|                                 |                                | \$32,583,000 00  | \$66,364 54                          | 2  | 7               | \$800                                      | 1  |
|                                 |                                | 11,773,000 00  | 5,799,507 38                         | 3  | 7               | 800  | 2  |
|                                 |                                | 1,650,000 00   | 2,704,918 00                         | 3  | 3               | 999,700                                    | 4  |
|                                 |                                | 9,247,450 00   | 35,214 97                            | 3  | 6               | 1,250                                      | 5  |
|                                 |                                | 27,955,450 00  | 50,933 65                            | 76   | 1,695           | 3,025,000                                  | 6  |
|                                 |                                | 1,500,000 00   | 40,322 58                            | 2  | 141             | 190,400                                    | 10 |
|                                 |                                | 926,000 00   | 712,307 69                           | 1  | .....           | 300,000                                    | 11 |
|                                 |                                | 6,752,000 00   | 211,000 00                           | 3  | .....           | 5,000,000                                  | 12 |
|                                 |                                | 24,936,000 00  | 70,949 74                            | 13   | 415             | 783,100                                    | 13 |
|                                 |                                | 13,592,666 67  | 279,799 64                           | 5  | 5               | 2,000,100                                  | 15 |
|                                 |                                | 1,831,370 00   | 37,698 02                            | 16   | 234             | 423,000                                    | 16 |
|                                 |                                | 18,600,000 00  | 56,967 84                            | 1  | 282             | 2,000                                      | 17 |
|                                 |                                | 3,791,200 00   | 972,102 56                           | 2  | 3               | 4,000                                      | 18 |
|                                 |                                | 500 00   | Less than a<br>mile in length        | 4  | 1               | 400  | 19 |
|                                 |                                | 3,578,000 00   | 34,403 70                            | 7  | 1               | 700  | 20 |
|                                 |                                | 171,268,320 53   | 40,294 82                            | 113  | 3,344           | 1,965,600                                  | 21 |
|                                 |                                | 49,549,000 00  | 2,742,058 66                         | 5  | 4               | 1,400                                      | 22 |
|                                 |                                | 1,307,100 00   | 15,198 83                            | 7  | 177             | 700  | 23 |
|                                 |                                | 22,090,000 00  | 63,264 31                            | 13   | 177             | 3,299,300                                  | 24 |
|                                 |                                | 182,713,793 70   | 39,180 96                            | .....  | .....           | .....                                      | 25 |
|                                 |                                | 483,800 00   | 39,623 24                            | 4  | 2               | 400  | 26 |
|                                 |                                | 2,663,200 00   | 45,338 77                            | 4  | 1               | 100  | 27 |
|                                 |                                | 5,500,000 00   | 19,378 46                            | 4  | 2               | 400  | 28 |
|                                 |                                | 187,401,861 00   | 33,128 42                            | 37   | 3,011           | 858,400                                    | 29 |
|                                 |                                | 4,595,000 00   | 38,907 70                            | 5  | .....           | 2,500,000                                  | 30 |
|                                 |                                | 2,420,000 00   | 21,549 41                            | .....  | .....           | .....                                      | 31 |
|                                 |                                | 1,020,800 00   | 19,782 94                            | .....  | .....           | .....                                      | 32 |
|                                 |                                | 1,247,000 00   | 76,036 57                            | .....  | .....           | .....                                      | 33 |
|                                 |                                | 67,656,000 00  | 57,055 15                            | 108  | 3,705           | 1,926,700                                  | 34 |
|                                 |                                | 1,500,000 00   | 32,120 00                            | 20   | 159             | 119,900                                    | 35 |
| \$553,200 00                    | \$952 94                       | 46,886,544 87  | 80,766 46                            | 1  | 730             | 10,500                                     | 36 |
|                                 |                                | 98,500 00  | 41,914 89                            | 4  | 2               | 400  | 37 |
|                                 |                                | 45,091,650 00  | 55,171 40                            | 2  | 350             | 19,500                                     | 38 |
|                                 |                                | 57,463,750 00  | 53,001 05                            | 1,153  | 15              | 135,600                                    | 39 |
|                                 |                                | 660,000 00   | 15,684 40                            | 1  | 1               | 5,000                                      | 42 |
|                                 |                                | 23,430,000 00  | 68,623 14                            | 5  | 5               | 21,200                                     | 43 |
|                                 |                                | 30,000 00  | 8,571 42                             | 3  | 2               | 25,000                                     | 44 |
|                                 |                                | 620,000 00   | 51,623 63                            | 8  | 6               | 11,500                                     | 45 |
|                                 |                                | 20,000 00  | 11,111 10                            | 4  | 3               | 19,700                                     | 46 |
|                                 |                                | 2,500 00   | .....                                | .....  | 5               | .....                                      | 47 |
|                                 |                                | 7,427,000 00   | 75,012 62                            | 5  | 8               | 5,000                                      | 48 |
|                                 |                                | 1,850,000 00   | 57,957 39                            | 4  | 8               | 1,500                                      | 49 |
|                                 |                                | 1,850,000 00   | 51,966 29                            | 5  | 1               | 2,500                                      | 50 |
|                                 |                                | 546,515 77   | 17,629 53                            | 22   | .....           | 375,515                                    | 51 |
|                                 |                                | 573,900 00   | 19,129 99                            | 13   | .....           | 260,900                                    | 52 |
|                                 |                                | 50,000 00  | 1,908 39                             | 3  | 4               | 3,000                                      | 53 |
|                                 |                                | 700,000 00   | 24,305 54                            | 4  | 5               | 51,500                                     | 54 |
|                                 |                                | 74,084,000 00  | 46,081 20                            | 101  | 3,744           | 1,109,000                                  | 55 |
|                                 |                                | 2,500,000 00   | 11,254 16                            | .....  | .....           | .....                                      | 57 |
|                                 |                                | 200,000 00   | 42,016 80                            | .....  | .....           | .....                                      | 63 |
| 39,545 00                       | 439 38                         | 2,678,545 00   | 29,760 38                            | 4  | 11              | 318,000                                    | 65 |
|                                 |                                | 5,218,950 00   | 38,157 07                            | 2  | 98              | 200  | 66 |
| 52,419 40                       | 443 51                         | 4,896,219 40   | 41,426 66                            | 3  | 7               | 300  | 67 |
| 108,561 43                      | 215 82                         | 19,505,021 08  | 38,775 44                            | 5  | 1,013           | 80,600                                     | 68 |
|                                 |                                | 29,600,000 00  | 50,853 00                            | 5  | 577             | 51,000                                     | 71 |
|                                 |                                | 96,266,000 00  | 103,590 57                           | 21   | 3,263           | 296,150                                    | 72 |
|                                 |                                | 25,000 00  | 10,000 00                            | 5  | .....           | 25,000                                     | 73 |
|                                 |                                | 7,500,000 00   | 36,057 67                            | .....  | .....           | .....                                      | 74 |
|                                 |                                | 12,976,384 00  | 36,113 73                            | 6  | 107             | 36,200                                     | 75 |
|                                 |                                | 15,900,000 00  | 31,148 37                            | 8  | 206             | 160,000                                    | 77 |
|                                 |                                | 28,738,204 00  | 106,410 20                           | 9  | 1,338           | 127,000                                    | 78 |



Table II, A.—

| NAME OF COMPANY.                                | 1                   | 2                        | 3                   | 4                        |
|---|---------------------|--------------------------|---------------------|--------------------------|
|   | CAPITAL STOCK.      |                          | BONDS.              |                          |
|   | Amount outstanding. | Amount per mile of road. | Amount outstanding. | Amount per mile of road. |
| 79 Joliet & Northern Indiana .....              | \$300,000 00        | \$6,666 66               | \$800,000 00        | \$17,777 77              |
| 80 Mobile & Ohio (4).....                       | 6,500,000 00        | 40,473 22                | 4,000,000 00        | 24,906 60                |
| 81 St. Louis & Cairo.....                       | 30,000,000 00       | 59,694 36                | 19,784,000 00       | 39,366 44                |
| 83 New York, Chicago & St. Louis .....          | 1,500,000 00        | 15,060 24                |                     |                          |
| 84 Chicago & State Line.....                    | 24,092,692 15       | 38,534 86                | 15,842,000 00       | 25,206 85                |
| 85 Ohio & Mississippi .....                     | 29,600 00           | 7,201 94                 |                     |                          |
| 87 Pawnee .....                                 |                     |                          |                     |                          |
| 88 Pennsylvania Co. (4).....                    |                     |                          |                     |                          |
| 89 Calumet River.....                           | 65,500 00           | 14,785 50                | 65,000 00           | 14,672 50                |
| 90 Pittsburgh, Ft. Wayne & Chicago .....        | 32,090,785 71       | 68,278 26                | 12,410,000 00       | 26,404 26                |
| 91 South Chicago & Southern.....                | 123,000 00          | 12,000 00                | 123,000 00          | 12,000 00                |
| 92 Peoria & Pekin Union.....                    | 1,000,000 00        | 55,524 70                | 2,994,000 00        | 166,240 97               |
| 93 Peoria, Decatur & Evansville.....            | 8,380,000 00        | 35,922 50                | 4,845,000 00        | 20,769 03                |
| 94 Quincy, Omaha & Kansas City.....             | 1,623,240 00        | 12,067 80                | 1,739,240 00        | 12,930 19                |
| 95 Rock Island & Peoria.....                    | 1,500,000 00        | 13,274 33                | 600,000 00          | 5,309 73                 |
| 96 St. Louis, Alton & Springfield.....          | 1,500,000 00        | 18,072 28                | 818,692 94          | 9,863 77                 |
| 98 St. Louis, Alton & Terre Haute.....          | 4,768,400 00        | 23,035 75                | 8,057,000 00        | 38,922 71                |
| 99 Belleville & Carondelet.....                 | 500,000 00          | 29,069 76                | 485,000 00          | 28,197 67                |
| 100 Belleville & Eldorado.....                  | 1,000,000 00        | 19,920 31                | 550,000 00          | 9,960 15                 |
| 101 Belleville & Southern Illinois.....         | 1,705,000 00        | 30,230 49                | 1,022,000 00        | 18,120 56                |
| 102 Chicago, St. Louis & Paducah.....           | 1,000,000 00        | 18,691 59                | 2,000,000 00        | 37,383 18                |
| 103 St. Louis Southern.....                     | 500,000 00          | 16,812 37                | 1,075,000 00        | 36,146 60                |
| 104 Carbondale & Shawneetown.....               | 356,600 00          | 20,377 14                | 250,000 00          | 14,285 71                |
| 105 St. Louis & Chicago.....                    | 2,800,000 00        | 52,830 18                | 1,400,000 00        | 26,415 10                |
| 106 St. Louis & Peoria.....                     | 280,000 00          | 20,000 00                | 182,000 00          | 13,000 00                |
| 107 Terminal Railroad Assn. of St. L. (1) ..... | 10,681,200 00       | 3,357,875 10             | 10,000,000 00       | 3,125,000 00             |
| 108 Terre Haute & Indianapolis (4).....         |                     |                          |                     |                          |
| 109 St. Louis, Vandalia & Terre Haute .....     | 3,924,058 10        | 24,782 48                | 4,499,000 00        | 28,413 54                |
| 110 Terre Haute & Peoria.....                   | 5,400,000 00        | 37,500 00                | 1,800,000 00        | 12,500 00                |
| 111 Toledo, Peoria & Western.....               | 4,500,000 00        | 19,556 71                | 4,800,000 00        | 20,860 50                |
| 112 Toledo, St. Louis & Kansas City.....        | 17,055,000 00       | 37,900 00                | 9,800,000 00        | 20,000 00                |
| 114 Wabash.....                                 | 52,000,000 00       | 33,661 31                | 78,000,000 00       | 50,492 00                |
| 115 Wabash, Chester & Western.....              | 250,000 00          | 5,915 76                 | 300,000 00          | 7,098 91                 |
| 116 Wisconsin Central Co.....                   | 3,618,237 33        | 15,504 30                | 11,209,642 21       | 48,033 77                |
| 117 Chicago & Wisconsin.....                    | 1,500,000 00        | 30,388 97                | 1,500,000 00        | 30,388 97                |
| Total .....                                     | \$847,488,296 90    | \$25,573 37              | \$920,683,061 73    | \$27,540 44              |

(1). Includes stock and bonds of the St. Louis Bridge Co. and stock of the Tunnel Railroad of St. Louis.

(2). Includes \$6,330,780.84 contingent liabilities of leased lines.

(3). These figures are on the basis of one mile.

(4). Inserted to show proper relation of road following.



Continued.

| 5                               | 6                              | 7  | 8                                    | 9   | 10                 | 11   |     |
|---------------------------------|--------------------------------|--|--------------------------------------|---|--------------------|--|-----|
| EQUIPMENT TRUST<br>OBLIGATIONS. |                                | SUMMARY.   |                                      | No.<br>of stock-<br>holders in Illi-<br>nois..... | No.<br>elsewhere.. | Amount<br>of stock<br>held in<br>Illinois. |     |
| Amount<br>outstanding.          | Amount<br>per mile<br>of road. | Total Capital<br>Stock, Bonds and<br>Equipment Trust<br>Obligations. | Total<br>amount per<br>mile of road. |   |                    |  |     |
| .....                           | .....                          | \$1,100,000 00   | \$24,444 43                          | .....   | .....              | .....                                      | 79  |
| .....                           | .....                          | 10,500,000 00  | 65,379 82                            | 6   | 6                  | \$600                                      | 80  |
| .....                           | .....                          | 49,784,000 00  | 99,060 80                            | 2   | 1,276              | 6,000                                      | 81  |
| .....                           | .....                          | 1,500,000 00   | 15,060 24                            | 5   | 4                  | 500  | 83  |
| \$504,000 00                    | \$801 93                       | 40,438,692 15  | 64,343 64                            | 6   | 773                | 148,000                                    | 84  |
| .....                           | .....                          | 29,600 00  | 7,201 94                             | 56  | .....              | 29,600                                     | 85  |
| .....                           | .....                          | .....  | .....                                | .....   | .....              | .....                                      | 87  |
| .....                           | .....                          | 130,500 00   | 29,458 00                            | 3   | 3                  | 300  | 88  |
| .....                           | .....                          | 44,500,785 71  | 94,682 52                            | 22  | 2,444              | 212,200                                    | 89  |
| .....                           | .....                          | 246,000 00   | 24,000 00                            | 5   | 3                  | 500  | 90  |
| .....                           | .....                          | 3,994,000 00   | 221,765 67                           | .....   | .....              | .....                                      | 91  |
| 57,000 00                       | 244 34                         | 13,282,000 00  | 56,935 87                            | .....   | .....              | .....                                      | 92  |
| .....                           | .....                          | 3,362,480 00   | 24,997 99                            | 29  | 70                 | 409,720                                    | 93  |
| .....                           | .....                          | 2,100,000 00   | 18,584 06                            | 15  | 110                | 979,500                                    | 94  |
| 63,321 94                       | 762 92                         | 2,382,014 88   | 28,698 97                            | 3   | 2                  | 1,000,000                                  | 95  |
| .....                           | .....                          | 12,825,400 00  | 61,958 46                            | 11  | 189                | 2,600                                      | 96  |
| .....                           | .....                          | 985,000 00   | 57,267 43                            | 4   | 2                  | 499,700                                    | 97  |
| .....                           | .....                          | 1,550,000 00   | 29,880 46                            | 19  | 24                 | 258,100                                    | 98  |
| .....                           | .....                          | 2,727,000 00   | 48,351 05                            | 2   | 52                 | 186,700                                    | 99  |
| .....                           | .....                          | 3,000,000 00   | 56,074 77                            | 6   | 3                  | 899,800                                    | 100 |
| .....                           | .....                          | 1,575,003 00   | 52,958 97                            | 5   | 24                 | 8,300                                      | 101 |
| .....                           | .....                          | 606,600 00   | 34,662 85                            | 94  | 26                 | 50,800                                     | 102 |
| .....                           | .....                          | 4,200,000 00   | 79,245 28                            | .....   | .....              | .....                                      | 103 |
| 71,457 64                       | 5,104 11                       | 533,457 64   | 38,104 11                            | 3   | .....              | 1,500                                      | 104 |
| .....                           | .....                          | 20,681,200 00  | 6,462,875 10                         | .....   | .....              | .....                                      | 105 |
| .....                           | .....                          | .....  | .....                                | .....   | .....              | .....                                      | 106 |
| .....                           | .....                          | 8,423,058 10   | 53,196 02                            | 185   | 87                 | 342,150                                    | 107 |
| .....                           | .....                          | 7,200,000 00   | 50,000 00                            | 4   | 64                 | 400  | 108 |
| .....                           | .....                          | 9,300,000 00   | 40,417 21                            | 12  | 262                | 560,000                                    | 109 |
| .....                           | .....                          | 26,855,000 00  | 57,900 00                            | 3   | 63                 | 300  | 110 |
| .....                           | .....                          | 130,000,000 00   | 84,153 31                            | .....   | .....              | Not known.                                 | 111 |
| .....                           | .....                          | 550,000 00   | 13,014 67                            | 5   | 3                  | 233,100                                    | 112 |
| .....                           | .....                          | 14,827,879 54  | 63,538 07                            | .....   | .....              | .....                                      | 113 |
| .....                           | .....                          | 3,000,000 00   | 60,777,94                            | 3   | 3                  | 300  | 114 |
| \$1,449,505 41                  | \$644 08                       | \$1,769,620,864 04   | \$53,757 89                          | 1,399   | 30,398             | \$32,480,885                               | 115 |

TABLE II, B.—*Capital Stock, Funded Debt and Current Liabilities for Mileage Operated, for year ending June 30, 1890.*

| NAME OF COMPANY.                                | CAPITAL STOCK.  |                          | FUNDED DEBT.     |                          | BALANCE, CURRENT LIABILITIES. |                          | SUMMARY.   |                                |
|---|-----------------|--------------------------|------------------|--------------------------|-------------------------------|--------------------------|--|--------------------------------|
|   | 1               | 2                        | 3                | 4                        | 5                             | 6                        | 7  | 8                              |
|   |                 |                          |                  |                          |                               |                          |  |                                |
|   | Amount.         | Amount per mile of road. | Amount.          | Amount per mile of road. | Amount.                       | Amount per mile of road. | Total amount Capital Stock, Funded Debt and Balance Current Liabilities. | Total amount per mile of road. |
| 1 Atchison, Topeka & Santa Fe (5).....          | \$21,000,000 00 | \$2,543 70               | \$25,006,000 00  | \$50,659 42              | \$5,400 07 75                 | \$10,939 84              | \$51,406 07 75   | \$104,142 96                   |
| 5 Baltimore & Ohio (2).....                     | 1,503,450 00    | 3,725 25                 | 7,744,000 00     | 29,489 72                | 3,833 02 51                   | 57,744 88                | 19,980 47 51   | 72,658 85                      |
| 7 Belt Railway of Chicago.....                  | 250,000 00      | 3,383 26                 |                  |                          | 707,888 45                    | 33,218 00                | 40,671 350 00  | 42,003 86                      |
| 9 Chicago & Alton.....                          | 25,025,000 00   | 25,490 91                | 15,613,350 00    | 18,432 10                |                               |                          | 6,732 000 00   | 211,000 00                     |
| 13 Chicago & Calumet Terminal.....              | 5,000,000 00    | 156 50 00                | 1,752,000 00     | 54 730 00                |                               |                          | 26,392 800 00  | 65,411 70                      |
| 14 Chicago & Eastern Illinois.....              | 11,319,800 00   | 27 431 29                | 15,673,000 00    | 37 980 41                | 430,031 39                    | 1,301 54                 | 22,821 231 39  | 69,071 51                      |
| 17 Chicago & Grand Trunk.....                   | 7,100,000 00    | 13 480 10                | 15,251,200 00    | 36 280 87                | 167,019 32                    | 1,611 73                 | 3,745 619 32   | 36,014 73                      |
| 20 Chicago & Iowa.....                          | 1,425,000 00    | 13 730 00                | 2,150,000 00     | 30 673 00                | 277,763 63                    | 65 35                    | 171,546 083 56   | 40,360 17                      |
| 21 Chicago & Northwestern.....                  | 66,282,820 53   | 15 394 56                | 104,985,500 00   | 24 700 26                |                               |                          | 49,549,000 00  | 2,742 058 06                   |
| 22 Chicago & North Western.....                 | 30,000,000 00   | 1,600 210 29             | 19,549,000 00    | 1,081 818 37             |                               |                          | 1,316 010 30   | 15,302 45                      |
| 23 Chicago & Ohio River.....                    | 438,800 00      | 5 102 32                 | 868,300 00       | 10 096 51                | 8,910 30                      | 103 62                   | 22,090 000 00  | 33,264 31                      |
| 24 Chicago, Burlington & Northern.....          | 9,289,500 00    | 26 604 52                | 12,800,500 00    | 36 669 79                |                               |                          | 191,360 735 70   | 38,132 36                      |
| 25 Chicago, Burlington & Quincy.....            | 81,131,505 00   | 16 167 63                | 4,110,226 288 70 | 21 964 73                |                               |                          | 187,401 861 00   | 33,128 42                      |
| 29 Chicago, Milwaukee & St. Paul.....           | 61,708,861 00   | 10 908 73                | 125,693,000 00   | 22,219 69                |                               |                          | 9,282 800 00   | 31,108 57                      |
| 30 Chicago, Peoria, & St. Louis.....            | 5,098,800 00    | 17 087 13                | 4,181,000 00     | 14 021 44                |                               |                          | 137,586 757 36   | 45,488 03                      |
| 34 Chicago, Rock Island & Pacific.....          | 84,513,080 00   | 27 911 16                | 52,471,000 00    | 17 347 62                | 602,077 36                    | 199 25                   | 47,767 502 62  | 82,283 90                      |
| 36 Chicago, St. Louis & Pittsburgh.....         | 26,748,014 87   | 46 076 01                | 20,138,500 00    | 34 690 45                | 880 957 75                    | 1,517 53                 | 38,500 00  | 41,914 80                      |
| 37 Englewood Connecting.....                    | 98,500 00       | 41 914 89                |                  |                          |                               |                          | 45,105 047 75  | 56,371 73                      |
| 38 Chicago, St. Paul & Kansas City.....         | 14,832,900 00   | 18 258 50                | 30,108,750 00    | 36 912 90                | 163 397 75                    | 200 33                   | 60,469 778 85  | 66,026 40                      |
| 39 Cleveland, Cincinnati, Chi. & St. Louis..... | 30,500,000 00   | 23 517 63                | 26,363,750 00    | 20 790 92                | 3,006 028 85                  | 2,317 85                 | 976 684 53   | 23,067 59                      |
| 42 Kankakee & Seneca.....                       | 10,000 00       | 237 64                   | 650,000 00       | 15 446 76                | 310,684 53                    | 7,383 19                 | 23,436 000 00  | 68,623 14                      |
| 43 Peoria and Eastern.....                      | 10,000,000 00   | 29 288 58                | 13,430,000 00    | 39 334 56                |                               |                          | 36,000 00  | 8,571 42                       |
| 44 DePue, Ladd & Eastern.....                   | 30,000 00       | 8 571 42                 |                  |                          |                               |                          | 620,000 00   | 51,623 63                      |
| 45 East St. Louis & Carondelet.....             | 420,000 00      | 31 970 85                | 200,000 00       | 16 652 78                |                               |                          | 11,297 391 64  | 115,217 61                     |
| 46 East St. Louis Connecting.....               | 20,000 00       | 11 111 10                |                  |                          | 187 391 64                    | 104,106 50               |  | 66,816 78                      |
| 48 Elgin, Joliet & Eastern.....                 | 6,000,000 00    | 36 029 04                | 5,127,000 00     | 30 787 24                |                               |                          | 1,747 514 59   | 18,812 19                      |
| 51 Fulton County Narrow Gauge.....              | 636,415 77      | 1 403 39                 | 484,000 00       | 7 934 42                 |                               |                          | 27,128 82  | 3,609 64                       |
| 53 Grand Tower & Carbondale.....                | 50,000 00       | 10 998 39                |                  |                          |                               |                          | 734 573 86   | 25,517 18                      |
| 54 Grand Tower & Cape Girardeau.....            | 350,000 00      | 12 172 77                | 350,000 00       | 12 152 77                | 31,894 32                     | 1,211 61                 | 107 296 277 45   | 47,150 96                      |
| 55 Illinois Central.....                        | 50,000,000 00   | 21 972 32                | 55,362,000 00    | 24 378 63                | 1,934 277 45                  | 850 01                   | 2,870 887 89   | 31,897 52                      |
| 65 Indiana & Illinois Southern.....             | 1,100,000 00    | 15 555 00                | 1,278,515 00     | 14 295 38                | 192 342 80                    | 2,137 14                 |  |                                |

|    |  |                  |              |                  |              |                 |            |                    |              |    |
|----|--|------------------|--------------|------------------|--------------|-----------------|------------|--------------------|--------------|----|
| 66 | Indianapolis, Decatur & Western .....                        | 1,000,000 00     | 6,557 371    | 4,218,950 00     | 31,599 70    | 171,261 60      | 1,122 951  | 5,390,211 60       | 39,280 02    | 67 |
| 67 | Indiana, Illinois & Iowa .....                               | 3,597,800 00     | 20,440 81    | 1,298,419 40     | 10,985 85    | 49,691 21       | 120 45     | 4,045,910 61       | 41,847 11    | 68 |
| 68 | Iowa Central .....   | 14,079,503 44    | 27,847 41    | 6,616,517 64     | 13,086 59    | 328,110 83      | 648 95     | 21,424,131 41      | 41,589 92    | 69 |
| 69 | Lake Erie & Western .....                                    | 23,680,000 00    | 10,682 00    | 5,920,000 00     | 10,171 00    | 188,946 21      | 324 61     | 29,788,946 21      | 51,177 61    | 70 |
| 70 | Lake Shore & Michigan Southern .....                         | 50,000,000 00    | 58,197 05    | 46,256,000 00    | 45,383 52    | .....           | .....      | 96,256,000 00      | 103,500 57   | 71 |
| 71 | Louisville & Nashville (S) .....                             | 1,000,000 00     | 4,807 69     | 6,500,000 00     | 31,210 98    | .....           | .....      | 7,500,000 00       | 46,057 07    | 72 |
| 72 | Louisville, Evansville & St. L. Consol. ....                 | 5,086,009 00     | 17,600 47    | 7,800,375 00     | 27,305 17    | 321,511 32      | 1,112 61   | 13,297,895 22      | 46,018 25    | 73 |
| 73 | Louisville, New Albany & Chicago .....                       | 5,900,000 00     | 11,558 20    | 10,000,000 00    | 10,500 17    | 883,023 16      | 1,731 03   | 16,783,023 16      | 32,879 40    | 74 |
| 74 | Michigan Central .....                                       | 43,730,523 00    | 27,420 81    | 44,684,444 02    | 28,493 15    | .....           | .....      | 88,111,073 02      | 57,457 96    | 75 |
| 75 | Moblie & Ohio .....  | 6,500,000 00     | 40,173 92    | 4,000,000 00     | 21,906 60    | .....           | .....      | 10,500,000 00      | 67,379 82    | 76 |
| 76 | New York, Chicago & St. Louis .....                          | 30,000,000 00    | 58,331 30    | 19,784,000 00    | 28,601 42    | .....           | .....      | 49,784,000 00      | 97,135 72    | 77 |
| 77 | Ohio & Mississippi .....                                     | 21,092,692 15    | 38,331 80    | 16,346,000 00    | 26,008 78    | 531,005 83      | 843 31     | 40,884,037 88      | 95,186 95    | 78 |
| 78 | Pawnee .....   | 23,600 00        | 7,304 94     | .....            | .....        | .....           | .....      | 23,600 00          | 7,201 94     | 79 |
| 79 | Pennsylvania Co. (Op. Pittsburgh, Ft. Wayne & Chicago) ..... | 32,090,785 71    | 65,278 25    | 12,410,000 00    | 26,401 26    | .....           | .....      | 44,500,785 71      | 94,682 52    | 80 |
| 80 | Pennsylvania Co. (Op. South Chicago & Southern) .....        | 123,000 00       | 12,000 00    | 123,000 00       | 12,000 00    | .....           | .....      | 246,000 00         | 24,000 00    | 81 |
| 81 | Peoria & Pekin Union .....                                   | 1,000,000 00     | 55,521 70    | 2,394,000 00     | 166,210 97   | .....           | .....      | 3,394,000 00       | 221,765 67   | 82 |
| 82 | Peoria, Decatur & Evansville .....                           | 8,380,000 00     | 36,053 86    | 4,902,000 00     | 21,090 23    | 297,797 35      | 1,132 16   | 13,510,797 35      | 58,296 25    | 83 |
| 83 | Quincy, Omaha & Kansas City .....                            | 1,623,240 00     | 12,007 80    | 1,733,210 00     | 12,930 19    | 31,574 20       | 534 73     | 3,394,054 20       | 25,232 72    | 84 |
| 84 | Rock Island & Peoria .....                                   | 1,500,000 00     | 13,271 33    | 600,000 00       | 5,303 73     | .....           | .....      | 2,100,000 00       | 18,584 06    | 85 |
| 85 | St. Louis, Alton & Springfield .....                         | 1,500,000 00     | 18,072 25    | 882,014 88       | 10,626 69    | 71,462 40       | 861 00     | 2,453,477 28       | 29,539 97    | 86 |
| 86 | St. Louis, Alton & Terre Haute .....                         | 9,830,000 00     | 22,773 60    | 13,532,000 00    | 31,350 19    | .....           | .....      | 23,362,000 00      | 54,123 79    | 87 |
| 87 | St. Louis & Chicago .....                                    | 2,800,000 00     | 52,830 18    | 1,400,000 00     | 26,415 10    | .....           | .....      | 4,200,000 00       | 79,245 28    | 88 |
| 88 | St. Louis & Peoria .....                                     | 280,000 00       | 20,000 00    | 253,457 67       | 18,104 11    | 96,215 82       | 6,801 13   | 628,673 49         | 44,905 24    | 89 |
| 89 | Terminal R. R. Ass'n of St. Louis (I) .....                  | 10,681,200 00    | 3,337,875 10 | 10,000,000 00    | 3,125,000 00 | 23,163 19       | 7,219 74   | 20,704,303 19      | 6,470,094 84 | 90 |
| 90 | Terre Haute & Indianapolis .....                             | 3,924,058 10     | 21,782 48    | 4,499,000 00     | 28,413 54    | .....           | .....      | 8,423,058 10       | 53,196 02    | 91 |
| 91 | Terre Haute & Peoria .....                                   | 5,400,000 00     | 37,500 00    | 1,800,000 00     | 12,500 00    | 1,333 27        | 9 26       | 7,201,333 27       | 50,009 26    | 92 |
| 92 | Toledo, Peoria & Western .....                               | 4,500,000 00     | 19,556 71    | 4,800,000 00     | 20,800 50    | 185,987 31      | 808 29     | 9,485,987 31       | 41,225 50    | 93 |
| 93 | Toledo, St. Louis & Kansas City .....                        | 17,055,000 00    | 37,900 00    | 9,800,000 00     | 20,000 00    | 16,781 19       | 37 29      | 26,871,781 19      | 84,133 31    | 94 |
| 94 | Wabash .....   | 52,000,000 00    | 33,661 31    | 78,000,000 00    | 50,482 00    | .....           | .....      | 130,000,000 00     | 84,153 31    | 95 |
| 95 | Wabash, Chester & Western .....                              | 250,000 00       | 5,915 76     | 300,000 00       | 7,068 91     | 13,454 73       | 318 37     | 563,454 73         | 13,333 04    | 96 |
| 96 | Wisconsin Central Co. ....                                   | 16,949,642 21    | 42,046 14    | 7,718,257 33     | 19,146 25    | 116,325 72      | 288 56     | 24,784,205 26      | 63,480 95    | 97 |
| 97 | Totals .....   | \$430,784,536 78 | \$24,786 66  | \$997,407,439 64 | \$26,489 72  | \$27,505,798 37 | \$1,506 80 | \$1,955,098,274 79 | \$52,783 18  | 98 |

(1) Includes stock and bonds of St. Louis Bridge Co. and stock of Tunnel Railroad of St. Louis.

(2) Represents stock, bonds, etc., of B. & O. & C. R. R.

(3) Represents stock, bonds, etc., of S. E. & St. L. Ry.

(4) Includes \$1,330,780.84 contingent liabilities of leased lines.

(5) Represents stocks, bonds, etc., of C., S. Fe & C. R. R., A., T. & S. Fe R. R. in Chicago, and Miss. River R. R. & Toll Bridge Co.

TABLE III. *Income Account—Whole Line,*

| NAME OF COMPANY.   | 1                              | 2                   |
|--|--------------------------------|---------------------|
|  | Gross earnings from operation. | Operating expenses. |
| 1 Atchison, Topeka & Santa Fe.....                             | \$4,564,391 92                 | \$3,013,960 10      |
| 5 Baltimore & Ohio.....  | 2,588,523 18                   | 2,141,558 08        |
| 7 Belt Railway of Chicago.....                                 | 643,719 58                     | 409,942 18          |
| 8 Centralia & Chester.....                                     | 5,186 89                       | 5,992 80            |
| 9 Chicago & Alton.....   | 8,063,498 50                   | 4,870,785 96        |
| 12 Chicago & Atlantic.....                                     | 2,678,926 65                   | 1,912,953 37        |
| 13 Chicago & Calumet Terminal.....                             | 5,040 69                       | 4,628 62            |
| 14 Chicago & Eastern Illinois.....                             | 2,911,722 65                   | 1,632,442 20        |
| 17 Chicago & Grand Trunk.....                                  | 3,956,315 43                   | 2,872,120 19        |
| 20 Chicago & Iowa.....   | 476,533 10                     | 254,290 47          |
| 21 Chicago & Northwestern.....                                 | 27,433,180 94                  | 17,055,856 33       |
| 23 Chicago & Ohio River.....                                   | 70,319 26                      | 60,534 29           |
| 24 Chicago, Burlington & Northern.....                         | 1,942,340 49                   | 1,225,004 55        |
| 25 Chicago, Burlington & Quincy.....                           | 28,238,424 92                  | 17,306,244 80       |
| 29 Chicago, Milwaukee & St. Paul.....                          | 26,473,486 44                  | 16,410,829 33       |
| 30 Chicago, Peoria & St. Louis.....                            | 683,196 03                     | 493,600 42          |
| 34 Chicago, Rock Island & Pacific.....                         | 17,915,916 32                  | 12,004,405 14       |
| 36 Chicago, St. Louis & Pittsburgh.....                        | 6,483,726 69                   | 4,769,374 50        |
| 37 Englewood Connecting.....                                   | 3,124 78                       | 1,899 93            |
| 38 Chicago, St. Paul & Kansas City.....                        | 4,225,664 81                   | 3,178,885 34        |
| 39 Cleveland, Cincinnati, Chicago & St. Louis.....             | 11,131,259 76                  | 7,131,484 57        |
| 42 Kankakee & Seneca.....                                      | 63,881 95                      | 62,565 97           |
| 43 Peoria & Eastern.....                                       | 719,142 01                     | 497,802 18          |
| 45 East St. Louis & Carondelet.....                            | 80,481 78                      | 55,288 06           |
| 46 East St. Louis Connecting.....                              | 149,703 82                     | 140,693 17          |
| 48 Elgin, Joliet & Eastern.....                                | 459,172 59                     | 297,845 07          |
| 51 Fulton County Narrow Gauge.....                             | 47,059 43                      | 47,763 69           |
| 53 Grand Tower & Carbondale.....                               | 83,788 30                      | 66,464 54           |
| 54 Grand Tower & Cape Girardeau.....                           | 14,018 55                      | 13,575 25           |
| 55 Illinois Central.....                                       | 14,365,231 38                  | 8,772,998 18        |
| 65 Indiana & Illinois Southern.....                            | 83,713 36                      | 61,171 24           |
| 66 Indianapolis, Decatur & Western.....                        | 436,397 25                     | 321,669 16          |
| 67 Indiana, Illinois & Iowa.....                               | 326,887 38                     | 255,349 81          |
| 68 Iowa Central.....   | 1,604,366 69                   | 1,176,348 35        |
| 71 Lake Erie & Western.....                                    | 2,500,097 86                   | 1,453,903 17        |
| 72 Lake Shore & Michigan Southern.....                         | 20,462,638 87                  | 13,357,872 29       |
| 74 Louisville & Nashville.....                                 | 1,175,540 40                   | 778,991 87          |
| 76 Louisville, Evansville & St. Louis, Consolidated.....       | 1,145,063 97                   | 707,608 13          |
| 77 Louisville, New Albany & Chicago.....                       | 2,583,610 50                   | 1,648,061 27        |
| 78 Michigan Central.....                                       | 14,340,498 45                  | 10,068,789 74       |
| 80 Mobile & Ohio.....  | 727,094 91                     | 538,400 69          |
| 83 New York, Chicago & St. Louis.....                          | 5,548,086 78                   | 4,220,762 49        |
| 85 Ohio & Mississippi.....                                     | 4,214,746 65                   | 2,770,311 48        |
| 86 Ohio, Indiana & Western.....                                | 774,806 22                     | 622,727 87          |
| 87 Pawnee.....   | 3,274 80                       | 2,604 39            |
| 88 Pennsylvania Co. (Op. Pittsburgh, Ft. Wayne & Chicago)..... | 11,650,600 73                  | 7,285,455 98        |
| 89 Pennsylvania Co. (Op. South Chicago & Southern).....        | 28,193 15                      | 22,402 57           |
| 92 Peoria & Pekin Union.....                                   | 462,663 80                     | 276,498 01          |
| 93 Peoria, Decatur & Evansville.....                           | 778,912 00                     | 416,233 30          |
| 94 Quincy, Omaha, & Kansas City.....                           | 247,442 29                     | 170,645 36          |
| 95 Rock Island & Peoria.....                                   | 656,026 00                     | 309,784 82          |
| 96 St. Louis, Alton & Springfield.....                         | 115,711 93                     | 107,527 05          |
| 98 St. Louis, Alton & Terre Haute.....                         | 1,207,362 80                   | 649,116 09          |
| 105 St. Louis & Chicago.....                                   | 62,710 60                      | 50,954 97           |
| 106 St. Louis & Peoria.....                                    | 9,009 24                       | 12,550 20           |
| 107 Terminal Railroad Association of St. Louis.....            | 1,739,443 96                   | 685,236 14          |
| 108 Terre Haute & Indianapolis.....                            | 1,832,991 26                   | 1,174,240 98        |
| 110 Terre Haute & Peoria.....                                  | 340,277 73                     | 246,725 17          |
| 111 Toledo, Peoria & Western.....                              | 904,980 50                     | 653,591 91          |
| 112 Toledo, St. Louis & Kansas City.....                       | 1,460,049 88                   | 953,697 79          |
| 114 Wabash.....  | 13,352,872 40                  | 9,673,221 18        |
| 115 Wabash, Chester & Western.....                             | 61,327 26                      | 46,677 60           |
| 116 Wisconsin Central Lines.....                               | 4,780,344 67                   | 2,770,157 18        |
| Totals.....  | \$262,091,753 14               | \$170,899,077 53    |

(4) Deficit from operation.



for year ending June 30, 1890.

| 3                          | 4                        | 5                          | 6                                   | 7                                | 8               |     |
|----------------------------|--------------------------|----------------------------|-------------------------------------|----------------------------------|-----------------|-----|
| INCOME FROM OTHER SOURCES. |                          |                            |                                     |                                  | Total income.   |     |
| Income from operation.     | Interest on bonds owned. | Dividends on stocks owned. | Miscellaneous income less expenses. | Total income from other sources. |                 |     |
| \$1,550,431 83             |                          |                            | \$3,285 83                          | \$3,285 85                       | \$1,553,717 66  | 1   |
| 446,965 10                 |                          |                            |                                     |                                  | 446,965 10      | 5   |
| 233,777 40                 |                          |                            |                                     |                                  | 233,777 40      | 7   |
| (1) 805 91                 |                          |                            |                                     |                                  | (1) 805 91      | 8   |
| 3,192,712 54               | \$233,290 00             | \$32,032 00                | 7,949 28                            | 273,271 28                       | 3,465,983 82    | 9   |
| 765,973 2                  |                          | 30,000 00                  | 1,349 83                            | 31,349 83                        | 797,323 11      | 12  |
| 412 07                     |                          |                            |                                     |                                  | 412 07          | 13  |
| 1,279,280 45               | 742 67                   | 26,061 85                  | 5,187 57                            | 31,992 09                        | 1,311,272 54    | 14  |
| 1,084,195 24               |                          |                            | 100,175 51                          | 100,175 51                       | 1,184,370 75    | 17  |
| 222,242 63                 |                          |                            |                                     |                                  | 222,242 63      | 20  |
| 10,377,324 61              | 458 34                   | 285,243 00                 | 124,178 36                          | 409,879 70                       | 10,787,204 31   | 21  |
| 9,784 97                   |                          |                            |                                     |                                  | 9,784 97        | 23  |
| 717,335 94                 |                          |                            |                                     |                                  | 717,335 94      | 24  |
| 10,932,180 12              | 752,435 50               |                            | 291,443 43                          | 1,043,878 93                     | 11,976,059 05   | 25  |
| 10,062,657 11              | 32,400 97                | 58,151 00                  | 116,677 64                          | 207,229 61                       | 10,269,886 72   | 29  |
| 189,595 61                 |                          |                            | 65,853 79                           | 65,853 79                        | 255,449 40      | 30  |
| 5,911,511 18               | 4,890 00                 | 52,110 00                  | 1,436,606 79                        | 1,493,606 79                     | 7,405,117 97    | 34  |
| 1,714,352 19               |                          |                            | 12,013 24                           | 12,013 24                        | 1,726,365 43    | 36  |
| 1,224 85                   |                          |                            |                                     |                                  | 1,224 85        | 37  |
| 1,046,779 47               |                          |                            |                                     |                                  | 1,046,779 47    | 38  |
| 3,999,775 19               | 36,820 00                | 19,899 52                  | 390 00                              | 57,109 52                        | 4,056,884 71    | 39  |
| 1,315 98                   |                          |                            |                                     |                                  | 1,315 98        | 42  |
| 221,339 83                 |                          |                            |                                     |                                  | 221,339 83      | 43  |
| 25,193 72                  |                          |                            | 75 00                               | 75 00                            | 25,268 72       | 45  |
| 9,010 65                   |                          |                            | 3,382 75                            | 3,382 75                         | 12,393 40       | 46  |
| 161,327 52                 |                          |                            | 85,766 67                           | 85,766 67                        | 247,094 19      | 48  |
| (1) 704 26                 |                          |                            |                                     |                                  | (1) 704 26      | 51  |
| 17,323 76                  |                          |                            |                                     |                                  | 17,323 76       | 53  |
| 443 30                     |                          |                            |                                     |                                  | 443 30          | 54  |
| 5,592,233 20               | 529,289 47               | 181,380 32                 | 69,832 47                           | 780,502 26                       | 6,372,735 46    | 55  |
| 22,542 12                  |                          |                            |                                     |                                  | 22,542 12       | 65  |
| 114,728 09                 |                          |                            |                                     |                                  | 114,728 09      | 66  |
| 71,537 57                  |                          |                            |                                     |                                  | 71,537 57       | 67  |
| 428,018 34                 |                          |                            | 471 50                              | 471 50                           | 428,489 84      | 68  |
| 1,046,194 69               |                          |                            |                                     |                                  | 1,046,194 69    | 71  |
| 7,104,766 58               | 45,290 00                | 217,193 75                 | 286,581 50                          | 549,065 25                       | 7,653,831 83    | 72  |
| 396,548 53                 |                          |                            |                                     |                                  | 396,548 53      | 74  |
| 437,455 84                 |                          |                            | 24,348 43                           | 24,348 43                        | 461,804 27      | 76  |
| 935,549 23                 |                          | 30,000 00                  |                                     | 30,000 00                        | 965,549 23      | 77  |
| 4,271,708 71               | 460 00                   | 42,015 50                  | 12,335 20                           | 54,810 70                        | 4,326,519 41    | 78  |
| 188,694 22                 |                          |                            |                                     |                                  | 188,694 22      | 80  |
| 1,327,324 29               |                          |                            | 8,993 29                            | 8,993 29                         | 1,336,317 58    | 83  |
| 1,444,435 17               |                          |                            | 711 90                              | 711 90                           | 1,445,147 07    | 85  |
| 149,168 35                 |                          |                            |                                     |                                  | 149,168 35      | 86  |
| 670 41                     |                          |                            |                                     |                                  | 670 41          | 87  |
| 4,367,144 75               |                          |                            | 145,179 81                          | 145,179 81                       | 4,512,324 56    | 88  |
| 5,790 58                   |                          |                            |                                     |                                  | 5,790 58        | 88  |
| 186,165 79                 |                          |                            |                                     |                                  | 186,165 79      | 92  |
| 362,678 70                 |                          |                            |                                     |                                  | 362,678 70      | 93  |
| 76,796 93                  |                          |                            | 29,525 72                           | 29,525 72                        | 106,322 65      | 94  |
| 346,241 18                 |                          | 640 00                     | 4,000 00                            | 4,640 00                         | 350,881 18      | 95  |
| 8,184 88                   |                          |                            |                                     |                                  | 8,184 88        | 96  |
| 558,186 71                 |                          |                            | 444,301 57                          | 444,301 57                       | 1,002,488 28    | 98  |
| 11,755 63                  |                          |                            |                                     |                                  | 11,755 63       | 105 |
| (1) 3,540 96               |                          |                            |                                     |                                  | (1) 3,540 96    | 106 |
| 1,054,207 82               |                          |                            | 185,912 50                          | 185,912 50                       | 1,240,120 32    | 107 |
| 658,750 28                 |                          |                            |                                     |                                  | 658,750 28      | 108 |
| 93,552 56                  |                          |                            |                                     |                                  | 93,552 56       | 110 |
| 251,388 59                 |                          |                            | 33,850 00                           | 33,850 00                        | 285,238 59      | 111 |
| 506,352 09                 |                          |                            |                                     |                                  | 506,352 09      | 112 |
| 3,679,651 22               |                          | 51,000 00                  | 221,434 51                          | 272,434 51                       | 3,952,085 73    | 114 |
| 14,649 66                  |                          |                            |                                     |                                  | 14,649 66       | 115 |
| 1,810,187 49               |                          |                            | 23 59                               | 23 59                            | 1,810,211 08    | 116 |
| \$91,697,726 74            | \$1,636,076 95           | \$1,025,726 94             | \$3,721,837 68                      | \$6,383,641 57                   | \$98,081,306 31 |     |



TABLE III. *Income Account—Whole Line,*

| NAME OF COMPANY.  | 9  | 10  |
|---|--|---|
|   | DEDUCTIONS                                     |   |
|   | Interest on<br>funded debt,<br><i>accrued.</i> | Interest on<br>interest bear-<br>ing current<br>liabilities<br><i>accrued</i> not<br>otherwise<br>provided for. |
| 1 Atchison, Topeka & Santa Fe.....                              | \$901,480 00                                   |   |
| 5 Baltimore & Ohio.....   | 464,640 00                                     | \$328,016 28  |
| 7 Belt Railway of Chicago.....                                  |  |   |
| 8 Centralia & Chester.....                                      |  |   |
| 9 Chicago & Alton.....  | 821,296 88                                     |   |
| 12 Chicago & Atlantic.....                                      | 13,605 36                                      |   |
| 13 Chicago & Calumet Terminal.....                              | 7,300 00                                       |   |
| 14 Chicago & Eastern Illinois.....                              | 768,662 83                                     | 2,851 45  |
| 17 Chicago & Grand Trunk.....                                   | 659,979 97                                     | 50,958 66   |
| 20 Chicago & Iowa.....  | 172,000 00                                     |   |
| 21 Chicago & Northwestern.....                                  | 5,803,688 38                                   |   |
| 23 Chicago & Ohio River.....                                    | 14,270 00                                      |   |
| 24 Chicago, Burlington & Northern.....                          | 695,075 00                                     |   |
| 25 Chicago, Burlington & Quincy.....                            | 5,532,620 17                                   |   |
| 29 Chicago, Milwaukee & St. Paul.....                           | 7,214,154 84                                   |   |
| 30 Chicago, Peoria & St. Louis.....                             | 75,000 00                                      | 280 00  |
| 34 Chicago, Rock Island & Pacific.....                          | 2,677,225 00                                   |   |
| 36 Chicago, St. Louis & Pittsburgh.....                         | 1,095,782 79                                   |   |
| 37 Englewood Connecting.....                                    |  |   |
| 38 Chicago, St. Paul & Kansas City.....                         | 54,589 79                                      |   |
| 39 Cleveland, Cincinnati, Chicago & St. Louis.....              | 1,439,081 02                                   |   |
| 42 Kankakee & Seneca.....                                       | 39,000 00                                      |   |
| 43 Peoria & Eastern.....  | 206,100 00                                     |   |
| 45 East St. Louis & Carondelet.....                             | 14,000 00                                      |   |
| 46 East St. Louis Connecting.....                               |  | 14,656 96   |
| 48 Elgin, Joliet & Eastern.....                                 | 171,350 00                                     |   |
| 51 Fulton County Narrow Gauge.....                              | 33,880 00                                      |   |
| 53 Grand Tower & Carbondale.....                                |  |   |
| 54 Grand Tower & Cape Girardeau.....                            | 21,000 00                                      |   |
| 55 Illinois Central.....  | 1,461,925 00                                   | 63,631 59   |
| 65 Indiana & Illinois Southern.....                             |  | 1,846 73  |
| 66 Indianapolis, Decatur & Western.....                         | 132,880 00                                     | 795 83  |
| 67 Indiana, Illinois & Iowa.....                                | 51,430 00                                      |   |
| 68 Iowa Central.....  | 296,796 76                                     | 4,784 97  |
| 71 Lake Erie & Western.....                                     | 296,000 00                                     |   |
| 72 Lake Shore & Michigan Southern.....                          | 3,234,765 00                                   |   |
| 74 Louisville & Nashville.....                                  | 300,000 00                                     |   |
| 76 Louisville, Evansville & St. Louis, (Consolidated).....      | 329,618 38                                     |   |
| 77 Louisville, New Albany & Chicago.....                        | 579,767 93                                     | 46,722 29   |
| 78 Michigan Central.....  | 1,073,800 00                                   |   |
| 80 Mobile & Ohio.....   | 160,000 00                                     |   |
| 83 New York, Chicago & St. Louis.....                           | 786,660 00                                     |   |
| 85 Ohio & Mississippi.....                                      | 1,054,245 31                                   | 921 12  |
| 86 Ohio, Indiana & Western.....                                 | 282,099 28                                     |   |
| 87 Pawnee.....  |  |   |
| 88 Pennsylvania Co., (Op. Pittsburgh, Ft. Wayne & Chicago)..... |  |   |
| 88 Pennsylvania Co., (Op. South Chicago & Southern).....        |  |   |
| 92 Peoria & Pekin Union.....                                    | 157,155 00                                     |   |
| 93 Peoria, Decatur & Evansville.....                            | 275,157 50                                     | 11,034 02   |
| 94 Quincy, Omaha & Kansas City.....                             | 61,275 28                                      |   |
| 95 Rock Island and Peoria.....                                  | 42,000 00                                      |   |
| 96 St. Louis, Alton & Springfield.....                          |  |   |
| 98 St. Louis, Alton & Terre Haute.....                          | 469,000 00                                     |   |
| 103 St. Louis & Chicago.....                                    | 84,000 00                                      |   |
| 106 St. Louis & Peoria.....                                     | 6,066 67                                       |   |
| 107 Terminal Railroad Association of St. Louis.....             | 168,750 00                                     |   |
| 108 Terre Haute & Indianapolis.....                             |  |   |
| 110 Terre Haute & Peoria.....                                   | 90,000 00                                      |   |
| 111 Toledo, Peoria & Western.....                               | 180,210 00                                     | 12,128 97   |

for year ending June 30, 1890.—Continued.

| 11                         | 12           | 13                   | 14                                    | 15           | 16           |     |
|----------------------------|--------------|----------------------|---------------------------------------|--------------|--------------|-----|
| FROM INCOME.               |              |                      |                                       |              |              |     |
| Rental of<br>leased lines. | Taxes.       | Other<br>deductions. | Total deduc-<br>tions from<br>income. | Net income.  | Net deficit. |     |
| \$700,934 22               | \$180,413 19 |                      | \$1,782,827 41                        |              | \$229,109 75 | 1   |
|                            | 78,672 00    |                      | 871,328 28                            |              | 424,363 18   | 5   |
| 100,005 00                 | 28,000 00    |                      | 128,005 00                            | \$105,772 40 |              | 7   |
|                            |              |                      |                                       |              | 805 91       | 8   |
| 670,316 57                 | 243,198 67   | \$92,387 60          | 1,827,199 72                          | 1,638,784 10 |              | 12  |
| 171,821 85                 | 77,823 86    |                      | 263,251 07                            | 534,072 04   |              | 13  |
|                            |              |                      | 7,360 00                              |              | 6,887 93     | 14  |
| 200,060 74                 | 98,927 26    |                      | 1,070,502 28                          | 240,770 26   |              | 17  |
| 164,560 00                 | 123,421 54   |                      | 998,920 17                            | 185,450 58   |              | 20  |
|                            | 16,556 87    | 4,325 77             | 192,882 64                            | 29,359 99    |              | 21  |
|                            | 758,043 04   | 202,570 00           | 6,764,301 42                          | 4,022,902 89 |              | 22  |
|                            | 7,752 78     |                      | 22,022 78                             |              | 12,237 81    | 23  |
| 101,454 76                 | 80,421 22    | 2,109 18             | 879,060 16                            |              | 161,724 22   | 24  |
| 216,346 90                 | 1,194,624 88 | 785,332 50           | 7,725,924 45                          | 4,250,134 60 |              | 25  |
|                            | 880,046 55   |                      | 8,044,201 39                          | 2,225,685 33 |              | 29  |
| 20,769 05                  | 16,737 61    |                      | 112,786 66                            | 142,662 74   |              | 30  |
| 2,000,885 74               | 742,128 34   |                      | 5,420,239 08                          | 1,984,878 89 |              | 34  |
| 55,103 88                  | 190,818 88   | 192,017 02           | 1,533,722 57                          | 192,642 86   |              | 36  |
|                            | 1,813 33     |                      | 1,813 33                              |              | 588 48       | 37  |
| (1) 296,234 87             | 87,000 00    |                      | 437,821 66                            | 608,954 81   |              | 38  |
| 744,584 76                 | 330,350 00   | 14,754 04            | 2,528,769 82                          | 1,528,114 89 |              | 39  |
|                            | 6,496 59     |                      | 45,496 59                             |              | 44,180 61    | 42  |
| 23,054 67                  | 9,000 00     | 110 67               | 238,265 34                            |              | 16,925 51    | 43  |
|                            | 3,135 72     |                      | 17,135 72                             | 8,133 00     |              | 45  |
| 23,316 71                  | 2,100 54     |                      | 40,074 21                             |              | 27,680 81    | 46  |
| 57,397 24                  | 13,639 35    | 114 00               | 212,500 59                            | 4,593 60     |              | 48  |
|                            | 2,589 81     |                      | 36,469 81                             |              | 37,174 07    | 51  |
| 5,499 98                   | 5,030 60     |                      | 10,530 58                             | 6,793 18     |              | 53  |
|                            |              | 402 92               | 21,402 92                             |              | 20,959 62    | 54  |
| 1,506,955 48               | 709,331 81   | 213,415 09           | 3,958,258 97                          | 2,414,476 49 |              | 55  |
|                            | 7,257 30     | 75 00                | 9,179 03                              | 13,363 09    |              | 65  |
|                            | 22,200 00    | 2,694 56             | 158,570 39                            |              | 43,842 30    | 66  |
|                            | 11,055 52    | 2,100 00             | 64,585 52                             | 6,952 05     |              | 67  |
| 42,935 16                  | 59,357 23    |                      | 403,874 12                            | 24,615 72    |              | 68  |
|                            | 92,382 44    | 441,201 53           | 829,583 97                            | 216,610 72   |              | 71  |
| 541,009 22                 | 503,416 61   | 53,350 00            | 4,332,540 83                          | 3,321,291 00 |              | 72  |
|                            | 12,929 70    |                      | 342,929 70                            | 53,618 83    |              | 74  |
| 17,590 90                  | 45,486 34    |                      | 392,695 62                            | 69,108 65    |              | 76  |
| 152,914 05                 | 84,277 40    |                      | 863,681 67                            | 101,867 56   |              | 77  |
| 456,233 92                 | 315,162 35   | 962,886 52           | 2,808,082 79                          | 1,518,436 62 |              | 78  |
|                            | 28,755 58    | 43,364 79            | 232,120 37                            |              | 43,426 15    | 80  |
| 94,512 12                  | 135,983 20   |                      | 1,017,104 32                          | 319,213 26   |              | 83  |
|                            | 142,161 39   | 62,303 53            | 1,259,631 35                          | 185,515 72   |              | 85  |
| 22,793 26                  | 31,354 35    |                      | 336,246 89                            |              | 187,078 54   | 86  |
| 181 00                     |              |                      | 181 00                                | 489 41       |              | 87  |
| 3,137,633 73               | 355,183 53   |                      | 3,492,817 56                          | 1,019,507 00 |              | 88  |
| 1,123 33                   | 4,067 25     |                      | 5,790 58                              |              |              | 88  |
|                            | 22,936 45    |                      | 180,091 45                            | 6,074 34     |              | 92  |
| 28,500 00                  | 40,228 12    | 33,000 00            | 387,919 64                            |              | 25,240 91    | 93  |
|                            | 12,110 01    |                      | 73,385 29                             | 32,937 36    |              | 94  |
|                            | 23,296 44    |                      | 65,296 44                             | 285,584 74   |              | 95  |
|                            | 8,655 21     |                      | 8,655 21                              |              | 470 53       | 96  |
| 341,318 77                 | 36,921 65    | 157,748 26           | 984,988 68                            | 17,499 60    |              | 98  |
|                            | 3,729 69     |                      | 87,729 69                             |              | 75,974 06    | 105 |
|                            | 800 00       | 274 50               | 7,141 17                              |              | 10,682 13    | 106 |
| 718,108 77                 | 81,079 05    | 62,245 70            | 1,030,183 52                          | 209,336 80   |              | 107 |
| 549,897 38                 | 54,520 60    |                      | 549,897 38                            | 108,852 90   |              | 108 |
|                            | 14,966 64    |                      | 104,966 64                            |              | 11,444 08    | 110 |
| 57,602 76                  | 34,836 45    |                      | 284,808 18                            | 430 41       |              | 111 |

Table III—

|     | NAME OF COMPANY.                      | 9  | 10  |
|-----|---------------------------------------|--|---|
|     |                                       | DEDUCTIONS                                     |   |
|     |                                       | Interest on<br>funded debt,<br><i>accrued.</i> | Interest on<br>interest bear-<br>ing current<br>liabilities<br><i>accrued</i> not<br>otherwise<br>provided for. |
| 112 | Toledo, St. Louis & Kansas City ..... |  |   |
| 114 | Wabash .....                          | \$2,801,920 82                                 |   |
| 115 | Wabash, Chester & Western .....       | 15,000 00                                      |   |
| 116 | Wiscon-in Central Lines.....          |  |   |
|     | Totals.....                           | \$43,289,334 96                                | \$538,628 87  |

Continued.

| 11                         | 12             | 13                   | 14                                    | 15              | 16             |     |
|----------------------------|----------------|----------------------|---------------------------------------|-----------------|----------------|-----|
| FROM INCOME.               |                |                      |                                       | Net income.     | Net deficit.   |     |
| Rental of<br>leased lines. | Taxes.         | Other<br>deductions. | Total deduc-<br>tions from<br>income. |                 |                |     |
| .....                      | \$36,000 00    | .....                | \$36,000 00                           | \$470,352 09    | .....          | 112 |
| \$60,900 00                | 396,490 54     | \$454,982 87         | 3,714,294 23                          | 237,791 50      | .....          | 114 |
| .....                      | 3,025 36       | .....                | 18,025 36                             | .....           | \$3,375 70     | 115 |
| 527,540 22                 | 35,321 04      | .....                | 562,861 26                            | 1,247,349 82    | .....          | 116 |
| \$13,810,097 01            | \$8,467,080 58 | \$3,763,766 05       | \$60,868,907 47                       | \$29,591,581 84 | \$1,384,172 13 |     |

(1) Includes rent of equipment.

(2) Paid by lessor company.

TABLE III. *Income Account.—Whole Line,*

| NAME OF COMPANY.                          | 17                  | 18             | 19             | 20             | 21                              |
|---|---------------------|----------------|----------------|----------------|---------------------------------|
|   | DIVIDENDS DECLARED. |                |                |                | Other payments from net income. |
|   | PREFERR'D STOCK     |                | COMMON STOCK.  |                |                                 |
|   | Amount.             | Rate per cent. | Amount.        | Rate per cent. |                                 |
| 1 Atchison, Topeka & Santa Fe .....       |                     |                |                |                |                                 |
| 5 Baltimore & Ohio .....                  |                     |                |                |                |                                 |
| 7 Belt Railway of Chicago .....           |                     |                |                |                |                                 |
| 8 Centralla & Chester .....               |                     |                |                |                |                                 |
| 9 Chicago & Alton .....                   | \$278,360 00        | 8.             | \$1,129,368 00 | 8.             |                                 |
| 12 Chicago & Atlantic .....               |                     |                |                |                |                                 |
| 13 Chicago & Calumet Terminal .....       |                     |                |                |                |                                 |
| 14 Chicago & Eastern Illinois .....       | 133,956 00          | 3.             |                |                |                                 |
| 17 Chicago & Grand Trunk .....            |                     |                |                |                | \$185,450 58                    |
| 20 Chicago & Iowa .....                   |                     |                |                |                |                                 |
| 21 Chicago & Northwestern .....           | 1,562,785 00        | 7.             | 1,882,194 00   | 6.             |                                 |
| 23 Chicago & Ohio River .....             |                     |                |                |                |                                 |
| 24 Chicago, Burlington & Northern .....   |                     |                |                |                |                                 |
| 25 Chicago, Burlington & Quincy .....     |                     |                | 3,437,667 00   | 4.5            |                                 |
| 29 Chicago, Milwaukee & St. Paul .....    | 1,296,829 00        | { 2.5<br>3.5   |                |                |                                 |
| 30 Chicago, Peoria & St. Louis .....      |                     |                |                |                |                                 |
| 31 Chicago, Rock Island & Pacific .....   |                     |                | 1,846,229 00   | 4.             |                                 |
| 36 Chicago, St. Louis & Pittsburgh .....  |                     |                |                |                |                                 |
| 37 Englewood Connecting .....             |                     |                |                |                |                                 |
| 38 Chicago, St. Paul & Kansas City .....  |                     |                |                |                |                                 |
| 39 CleveInd, Cincinnati, Chicago & St. L. | 500,000 00          | 5.             | 820,000 00     | 4.             |                                 |
| 42 Kankakee & Seneca .....                |                     |                |                |                | 15 55                           |
| 43 Peoria & Eastern .....                 |                     |                |                |                |                                 |
| 45 East St. Louis & Carondelet .....      |                     |                |                |                | 4,000 00                        |
| 46 East St. Louis Connecting .....        |                     |                |                |                |                                 |
| 48 Elgin, Joliet & Eastern .....          |                     |                |                |                |                                 |
| 51 Fulton County Narrow Gauge .....       |                     |                |                |                |                                 |
| 53 Grand Tower & Carbondale .....         |                     |                |                |                |                                 |
| 54 Grand Tower & Cape Girardeau .....     |                     |                |                |                |                                 |
| 55 Illinois Central .....                 |                     |                | 2,400,000 00   | 6.             |                                 |
| 65 Indiana & Illinois Southern .....      |                     |                |                |                |                                 |
| 66 Indianapolis, Decatur & Western .....  |                     |                |                |                |                                 |
| 67 Indiana, Illinois & Iowa .....         |                     |                |                |                | 81,586 75                       |
| 68 Iowa Central .....                     |                     |                |                |                |                                 |
| 71 Lake Erie & Western .....              | 355,200 00          | 3.             |                |                |                                 |
| 72 Lake Shore & Michigan Southern .....   |                     |                | 2,473,325 00   | 5.             |                                 |
| 74 Louisville & Nashville .....           |                     |                |                |                |                                 |
| 76 Louisville, Evansville & St. L., Con.. |                     |                |                |                |                                 |
| 77 Louisville, New Albany & Chicago ..... |                     |                |                |                |                                 |
| 78 Michigan Central .....                 |                     |                | 936,910 20     | 5.             | 430,430 86                      |
| 80 Mobile & Ohio .....                    |                     |                |                |                |                                 |
| 83 New York, Chicago & St. Louis .....    |                     |                |                |                | 99,954 25                       |
| 85 Ohio & Mississippi .....               |                     |                |                |                |                                 |
| 86 Ohio, Indiana & Western .....          |                     |                |                |                |                                 |
| 87 Pawnee .....                           |                     |                |                |                |                                 |
| 88 Penn. Co. (Op. Pitts., Ft. W. & Chi.)  |                     |                |                |                |                                 |
| 88 Penn. Co. (Op. So. Chi. & Southern)    |                     |                |                |                |                                 |
| 92 Peoria & Pekin Union .....             |                     |                |                |                |                                 |
| 93 Peoria, Decatur & Evansville .....     |                     |                |                |                |                                 |
| 94 Quincy, Omaha & Kansas City .....      |                     |                |                |                |                                 |
| 95 Rock Island & Peoria .....             |                     |                | 75,000 00      | 5.             |                                 |
| 96 St. Louis, Alton & Springfield .....   |                     |                |                |                |                                 |
| 98 St. Louis, Alton & Terre Haute .....   |                     |                |                |                |                                 |
| 105 St. Louis & Chicago .....             |                     |                |                |                |                                 |
| 106 St. Louis & Peoria .....              |                     |                |                |                |                                 |
| 107 Terminal Railroad Assoc. of St. Louis |                     |                |                |                |                                 |
| 108 Terre Haute & Indianapolis .....      |                     |                |                |                |                                 |
| 110 Terre Haute & Peoria .....            |                     |                |                |                |                                 |



for year ending June 30, 1890.—Continued.

| 22                                       | 23   | 24   | 25                           | 26                           | 27  | 28   |     |
|--|--|--|------------------------------|------------------------------|---|--|-----|
| Total<br>payments<br>from net<br>income. | Surplus<br>for year<br>ending<br>June 30, 1890 | Deficit<br>for year<br>ending<br>June 30, 1890 | Surplus on<br>June 30, 1889. | Deficit on<br>June 30, 1889. | Balance<br>surplus car-<br>ried for-<br>ward to next<br>year. | Balance<br>deficit car-<br>ried forward<br>to next year. |     |
| .....                                    | .....  | \$229,109 75                                   | .....                        | \$1,179,231 73               | .....   | \$1,408,341 48   | 1   |
| .....                                    | .....  | 424,363 18                                     | .....                        | 3,941,726 23                 | .....   | 4,366,689 41   | 5   |
| .....                                    | \$105,772 40                                   | .....  | .....                        | 602,040 38                   | .....   | 496,267 98   | 7   |
| .....                                    | .....  | 805 91   | .....                        | .....                        | .....   | 805 91   | 8   |
| \$1,407,728 00                           | 231,056 10                                     | .....  | \$2,493,242 14               | .....                        | (4)\$2,358,259 50   | .....  | 9   |
| .....                                    | (11)573,045 20                                 | .....  | .....                        | .....                        | .....   | .....  | 12  |
| .....                                    | .....  | 6,887 93                                       | .....                        | .....                        | .....   | 6,887 93   | 13  |
| 133,956 00                               | 106,814 26                                     | .....  | 55,101 39                    | .....                        | (5)1,063,381 35   | .....  | 14  |
| 185,450 58                               | .....  | .....  | .....                        | .....                        | .....   | .....  | 17  |
| .....                                    | 29,359 99                                      | .....  | 45,952 65                    | .....                        | 75,312 64   | .....  | 20  |
| 3,444,979 00                             | 577,923 89                                     | .....  | 5,042,579 52                 | .....                        | (1)5,304,843 51   | .....  | 21  |
| .....                                    | .....  | 12,237 81                                      | .....                        | 17,750 33                    | .....   | 29,988 14  | 23  |
| .....                                    | .....  | 161,724 22                                     | .....                        | 501,804 58                   | .....   | 663,528 80   | 24  |
| 3,437,667 00                             | 812,467 60                                     | .....  | 9,279,141 57                 | .....                        | 10,091,609 17   | .....  | 25  |
| 1,296,829 00                             | 928,856 33                                     | .....  | 1,538,682 44                 | .....                        | (10)2,419,514 55  | .....  | 29  |
| .....                                    | .....  | .....  | .....                        | .....                        | 142,662 74  | .....  | 30  |
| 1,846,229 00                             | 142,662 74                                     | .....  | .....                        | 536,598 50                   | .....   | 397,948 61   | 34  |
| .....                                    | 138,649 89                                     | .....  | .....                        | 933,408 18                   | .....   | 740,765 32   | 36  |
| .....                                    | 192,642 86                                     | .....  | .....                        | .....                        | .....   | 588 48   | 37  |
| .....                                    | .....  | 588 48   | .....                        | (3).....                     | 608,954 81  | .....  | 38  |
| 1,320,000 00                             | 608,954 81                                     | .....  | 449,538 52                   | .....                        | (9) 633,717 40  | .....  | 39  |
| 15 55                                    | 208,114 89                                     | .....  | .....                        | 244,259 50                   | .....   | 288,455 66   | 42  |
| .....                                    | .....  | 44,196 16                                      | .....                        | .....                        | .....   | 16,925 51  | 43  |
| 4,000 00                                 | 4,133 00                                       | 16,925 51                                      | .....                        | .....                        | .....   | .....  | 45  |
| .....                                    | .....  | 27,680 81                                      | 30,971 39                    | .....                        | 35,104 39   | .....  | 46  |
| .....                                    | 4,593 60                                       | .....  | 64,320 81                    | .....                        | 36,640 03   | .....  | 48  |
| .....                                    | .....  | 37,174 07                                      | 3,205 04                     | .....                        | 7,798 64  | .....  | 51  |
| .....                                    | 6,793 18                                       | .....  | .....                        | 29,979 19                    | .....   | 67,153 26  | 53  |
| .....                                    | .....  | 11,671 33                                      | .....                        | .....                        | 18,464 51   | .....  | 54  |
| 2,400,000 00                             | 14,476 49                                      | 20,959 62                                      | 5,890,527 10                 | .....                        | 5,905,003 59  | 20,959 62  | 55  |
| .....                                    | 13,363 09                                      | .....  | 21,843 44                    | .....                        | 35,206 53   | .....  | 56  |
| .....                                    | .....  | 43,842 30                                      | .....                        | 70,472 66                    | .....   | 114,314 96   | 66  |
| 81,586 75                                | .....  | 74,634 70                                      | .....                        | 2,898,176 44                 | .....   | 2,972,811 14   | 67  |
| .....                                    | 24,615 72                                      | .....  | .....                        | 20,773 36                    | 3,842 36  | .....  | 68  |
| 355,200 00                               | .....  | 138,589 28                                     | 391,640 28                   | .....                        | 253,051 00  | .....  | 71  |
| 2,473,325 00                             | 847,966 00                                     | .....  | 10,833,821 94                | .....                        | 11,681,787 94   | .....  | 72  |
| .....                                    | 53,618 83                                      | .....  | .....                        | 30,272 74                    | 23,346 09   | .....  | 74  |
| .....                                    | 69,108 65                                      | .....  | (14) 807,423 47              | .....                        | 876,532 12  | .....  | 76  |
| .....                                    | 101,867 56                                     | .....  | (13)1,135,985 06             | .....                        | 1,237,852 62  | .....  | 77  |
| 1,367,341 06                             | 151,095 56                                     | .....  | 7,125,828 38                 | .....                        | (6)6,879,181 34   | .....  | 78  |
| .....                                    | .....  | 43,426 15                                      | .....                        | 68,879 63                    | .....   | 112,305 78   | 80  |
| 99,954 25                                | (7) 225,304 76                                 | .....  | .....                        | 1,182 71                     | 224,122 05  | .....  | 83  |
| .....                                    | 185,515 72                                     | .....  | 237,919 34                   | .....                        | 423,435 06  | .....  | 85  |
| .....                                    | .....  | 187,078 54                                     | .....                        | 327,467 12                   | .....   | 514,545 06   | 86  |
| .....                                    | 489 41   | .....  | .....                        | 489 41                       | .....   | .....  | 87  |
| .....                                    | 1,019,507 00                                   | .....  | .....                        | 403,823 69                   | 615,678 31  | .....  | 88  |
| .....                                    | .....  | .....  | .....                        | 5,985 34                     | .....   | 5,985 34   | 88  |
| .....                                    | 6,074 34                                       | .....  | 70,690 81                    | .....                        | .....   | .....  | 92  |
| .....                                    | .....  | 25,240 94                                      | 181,864 02                   | .....                        | 76,765 15   | .....  | 93  |
| .....                                    | 32,937 36                                      | .....  | 16,228 34                    | .....                        | 156,623 08  | .....  | 94  |
| 75,000 00                                | 210,584 74                                     | .....  | 435,678 21                   | .....                        | 49,165 70   | .....  | 95  |
| .....                                    | .....  | 470 33   | 14,056 65                    | .....                        | 646,262 98  | .....  | 96  |
| .....                                    | 17,499 60                                      | .....  | (8) 283,938 97               | .....                        | 13,586 32   | .....  | 98  |
| .....                                    | .....  | 75,974 06                                      | .....                        | 81,434 99                    | 301,438 57  | .....  | 99  |
| .....                                    | 10,682 13                                      | .....  | .....                        | .....                        | .....   | 157,409 05   | 105 |
| .....                                    | 209,936 80                                     | .....  | .....                        | 53,734 78                    | 156,202 02  | 10,682 13  | 106 |
| .....                                    | 108,852 90                                     | .....  | 16,339 68                    | .....                        | 125,192 58  | .....  | 107 |
| .....                                    | .....  | 11,444 08                                      | .....                        | 92,425 04                    | .....   | 103,869 12   | 110 |

Table III—

| NAME OF COMPANY.                          | 17                  | 18             | 19              | 20             | 21                              |
|---|---------------------|----------------|-----------------|----------------|---------------------------------|
|   | DIVIDENDS DECLARED. |                |                 |                | Other payments from net income. |
|   | PREFERRED STOCK.    |                | COMMON STOCK.   |                |                                 |
|   | Amount.             | Rate per cent. | Amount.         | Rate per cent. |                                 |
| 111 Toledo, Peoria & Western .....        |                     |                |                 |                |                                 |
| 112 Toledo, St. Louis & Kansas City ..... |                     |                |                 |                | (12)\$470,352 09                |
| 114 Wabash. ....                          |                     |                |                 |                |                                 |
| 115 Wabash, Chester & Western.....        |                     |                |                 |                |                                 |
| 116 Wisconsin Central Lines.....          |                     |                |                 |                |                                 |
| Totals.....                               | \$4,127,130 00      | .....          | \$15,000,693 20 | .....          | \$1,271,790 08                  |

(1) Less \$315,659.90 charged to income account C., St. P., M. & O. R. R.

(2) Includes \$133,862.56, balance improvement account.

(3) \$731,358.29 created during construction period, charged to cost of road.

(4) Surplus on June 30, 1890, less \$366,038.74 charged to permanent improvements.

(5) Includes \$901,465.70, increase in ledger value of other stocks owned.

(6) Less accrued interest, \$397,742.60, not heretofore deducted.

(7) Includes \$6,045.75 discount on bonds of company purchased.

(8) Difference between amount here reported and amount reported in last year's report as surplus on June 30, 1889, is caused by a change in the method of auditing taxes.

Continued.

| 22                                       | 23   | 24   | 25                           | 26                           | 27  | 28   |     |
|--|--|--|------------------------------|------------------------------|---|--|-----|
| Total<br>payments<br>from net<br>income. | Surplus<br>for year<br>ending<br>June 30, 1890 | Deficit<br>for year<br>ending<br>June 30, 1890 | Surplus on<br>June 30, 1889. | Deficit on<br>June 30, 1889. | Balance<br>surplus car-<br>ried for-<br>ward to next<br>year. | Balance<br>deficit car-<br>ried forward<br>to next year. |     |
| .....                                    | (2)\$134,292 97 .....                          | .....  | .....                        | \$320,280 31 .....           | .....   | \$185,987 34   | 111 |
| \$470,352 09                             | 237,791 50 .....                               | .....  | .....                        | .....                        | \$237,791 50 .....  | .....  | 112 |
| .....                                    | .....  | \$3,375 70 .....                               | .....                        | 75,286 79 .....              | .....   | 78,662 49  | 114 |
| .....                                    | 1,247,349 82 .....                             | .....  | .....                        | .....                        | 1,247,349 82 .....  | .....  | 115 |
| .....                                    | .....  | .....  | .....                        | .....                        | .....   | .....  | 116 |
| \$20,399,613 28                          | \$9,584,089 56                                 | \$1,597,411 66                                 | \$46,478,192 55              | \$12,436,999 22              | \$53,966,169 38   | \$12,761,279 12  |     |

(9) Less net deductions for year, \$23,936.01.

(10) Less net deductions for year, \$48,024.22.

(11) Surplus to balance, \$38,973.16.

(12) Turned over to contractors.

(13) Does not include \$123,397.49, deductions for year.

(14) Includes \$384,501.85 additions during current year.

TABLE IV.—Total Earnings from Operation in Illinois, for year ending June 30, 1890.

| NAME OF COMPANY.                                  | PASSENGER DEPARTMENT. |             |                                 |                     |                             |
|---|-----------------------|-------------|---------------------------------|---------------------|-----------------------------|
|   | 1                     | 2           | 3                               | 4                   | 5                           |
|   | From passengers.      | From mails. | From express and extra baggage. | From other sources. | Total passenger department. |
| 1 Atchison, Topeka & Santa Fe .....               | \$376,015 48          | \$22,427 49 | \$63,163 76                     | \$947 13            | \$462,553 86                |
| 5 Baltimore and Ohio .....                        | 30,959 72             | 3,261 02    | 2,478 35                        | 231 65              | 36,980 74                   |
| 7 Belt Railway of Chicago .....                   | 2,096 86              | 261 92      | 219 67                          | .....               | 2,608 45                    |
| 8 Centralia & Chester .....                       | 1,702,941 03          | 130,993 09  | 145,886 42                      | .....               | 1,979,820 54                |
| 9 Chicago & Alton .....                           | 33,504 24             | 1,334 26    | 3,591 09                        | .....               | 39,257 05                   |
| 12 Chicago & Atlantic .....                       | .....                 | .....       | .....                           | .....               | .....                       |
| 13 Chicago & Calumet Terminal .....               | 410,731 34            | 21,972 41   | 38,637 25                       | 3,878 14            | 474,619 14                  |
| 14 Chicago & Eastern Illinois .....               | 126,898 36            | 4,118 62    | 16,898 70                       | 120 00              | 148,035 68                  |
| 17 Chicago & Grand Trunk .....                    | 116,274 13            | 15,836 32   | 24,999 96                       | .....               | 157,110 41                  |
| 20 Chicago & Iowa .....                           | 873,736 90            | 89,830 20   | 67,871 60                       | .....               | 1,025,163 84                |
| 21 Chicago & Northwestern .....                   | 12,171 55             | 3,689 75    | 7,001 40                        | 2,565 14            | 16,163 13                   |
| 23 Chicago & Ohio River .....                     | 87,953 46             | 8,431 03    | 7,000 40                        | 155 17              | 103,540 06                  |
| 24 Chicago, Burlington & Northern .....           | 1,477,272 75          | 20,873 89   | 169,740 44                      | 9,559 11            | 1,897,427 07                |
| 25 Chicago, Burlington & Quincy .....             | 336,168 13            | 59,651 55   | 40,493 61                       | 12,007 11           | 438,720 40                  |
| 29 Chicago, Milwaukee & St. Paul .....            | 193,655 29            | 17,870 91   | 27,249 96                       | .....               | 238,176 16                  |
| 30 Chicago, Peoria and St. Louis .....            | (9471,859 52          | (940,352 89 | (940,246 50                     | (911,495 20         | (9564,504 11                |
| 34 Chicago, Rock Island & Pacific .....           | 59,876 59             | 11,383 02   | 6,838 88                        | 470 12              | 78,008 61                   |
| 35 Chicago, St. Louis & Pittsburgh .....          | .....                 | .....       | .....                           | .....               | .....                       |
| 37 Englewood Connecting .....                     | 186,683 06            | 14,150 58   | 17,905 16                       | .....               | 201,801 01                  |
| 38 Chicago, St. Paul & Kansas City .....          | 1,021,617 40          | 108,151 81  | 86,341 54                       | 43,062 21           | 1,216,110 75                |
| 39 Cleveland Cincinnati Chicago & St. Louis ..... | 11,200 36             | 1,892 20    | 2,400 00                        | .....               | 15,552 56                   |
| 42 Kankakee & Seneca .....                        | 74,008 65             | 8,003 90    | 7,402 62                        | .....               | 88,415 17                   |
| 43 Peoria & Eastern .....                         | .....                 | .....       | .....                           | .....               | .....                       |
| 45 East St. Louis & Grandolet .....               | .....                 | .....       | .....                           | .....               | .....                       |
| 46 East St. Louis Connecting .....                | .....                 | .....       | .....                           | .....               | .....                       |
| 48 Elgin, Joliet & Eastern .....                  | 14,357 93             | 227 76      | 3,500 00                        | .....               | 18,085 69                   |
| 51 Fulton County Narrow Gauge .....               | 13,776 41             | 2,532 06    | 2,876 76                        | .....               | 19,470 13                   |
| 53 Grand Tower & Carbondale .....                 | 9,058 33              | 1,219 79    | 108 56                          | .....               | 10,468 68                   |
| 54 Grand Tower & Cape Girardeau .....             | 1,988 63              | 376 74      | 105 00                          | .....               | 2,463 37                    |
| 55 Illinois Central .....                         | 1,805,922 19          | 188,269 85  | 207,915 11                      | 67,480 27           | 2,322,527 32                |
| 63 Indiana & Illinois Southern .....              | 49,602 35             | 2,286 80    | 1,063 49                        | .....               | 53,954 64                   |
| 66 Indianapolis, Decatur & Western .....          | 63,762 36             | 8,243 64    | 9,703 71                        | 331 50              | 82,644 21                   |

|        |  |                 |                |                |              |                 |
|--------|--|-----------------|----------------|----------------|--------------|-----------------|
| 67     | Indiana, Illinois & Iowa                               | 6,259.03        | 2,902.32       | 2,710.44       | .....        | 11,880.79       |
| 68     | Iowa Central   | 40,875.61       | 4,466.26       | 3,169.82       | .....        | 48,541.61       |
| 69     | Lake Erie & Western                                    | 131,295.99      | 9,170.27       | 13,970.43      | .....        | 157,736.68      |
| 70     | Lake Shore & Michigan Southern                         | 129,498.21      | 19,590.86      | 9,157.01       | .....        | 157,255.08      |
| 71     | Louisville & Nashville                                 | 296,014.71      | 26,553.31      | 25,834.68      | 1,362.46     | 349,793.16      |
| 72     | Louisville, Evansville & St. Louis Consolidated        | 54,354.22       | 3,904.21       | 4,000.00       | .....        | 62,346.43       |
| 73     | Louisville, New Albany & Chicago                       | 21,957.55       | 2,787.17       | 4,461.52       | .....        | 29,346.77       |
| 74     | Michigan Central                                       | 151,986.65      | 3,198.72       | 5,298.53       | .....        | 173,683.90      |
| 75     | Mobile & Ohio  | 121,983.46      | 11,884.55      | 23,444.83      | .....        | 158,912.84      |
| 76     | New York, Chicago & St. Louis                          | 13,578.23       | 11,827.28      | 69,843.70      | .....        | 145,942.92      |
| 77     | Ohio & Mississippi                                     | 677,117.27      | 75,806.66      | 7,067.36       | 3,348.84     | 825,115.47      |
| 78     | Ohio, Indiana & Western                                | 100,673.39      | 8,632.36       | 7,041.07       | 298.79       | 116,092.55      |
| 79     | Pawnee   | 945.49          | 6,840.56       | 7,249.69       | .....        | 14,092.71       |
| 80     | Pennsylvania Co. (Op. Pittsburgh, Ft. Wayne & Chicago) | 87,169.35       | .....          | 1,235.20       | 1,524.13     | 102,733.33      |
| 81     | Pennsylvania Co. (Op. South Chicago & Southern)        | 13,757.31       | .....          | 1,235.20       | .....        | 15,227.31       |
| 82     | Peoria & Pekin Union                                   | 14,773.66       | .....          | 13,834.00      | .....        | 16,005.86       |
| 83     | Peoria, Decatur & Evansville                           | 147,144.22      | 16,379.59      | 240.00         | .....        | 177,558.41      |
| 84     | Quincy, Omaha & Kansas City                            | 2,667.61        | 270.42         | 7,307.30       | .....        | 3,178.03        |
| 85     | Rock Island & Peoria                                   | 111,332.58      | 9,406.22       | 4,858.28       | .....        | 128,596.10      |
| 86     | St. Louis, Alton & Springfield                         | 32,731.79       | 4,478.07       | 21,228.00      | .....        | 42,008.14       |
| 87     | St. Louis, Alton & Terre Haute                         | 211,323.21      | 23,249.53      | 883.16         | .....        | 235,807.34      |
| 88     | St. Louis & Chicago                                    | 20,520.61       | 2,185.20       | .....          | .....        | 23,588.97       |
| 89     | St. Louis & Peoria                                     | 179,861.87      | 12,500.00      | 21,225.08      | .....        | 213,586.95      |
| 90     | Terminal Railroad Association of St. Louis             | 441,472.08      | 175,757.30     | 46,787.53      | 797.40       | 664,814.31      |
| 91     | Terre Haute & Indianapolis                             | 79,752.73       | 9,763.94       | 7,825.00       | .....        | 97,281.67       |
| 92     | Terre Haute & Peoria                                   | 298,062.17      | 26,334.84      | 33,047.05      | 440.50       | 297,884.56      |
| 93     | Toledo, Peoria & Western                               | 52,643.37       | 6,703.32       | 3,600.00       | .....        | 62,946.69       |
| 94     | Toledo, St. Louis & Kansas City                        | 1,059,120.89    | 117,649.37     | 136,681.61     | .....        | 1,313,451.87    |
| 95     | Wabash   | 17,198.66       | 2,856.43       | 1,020.43       | 40.00        | 21,115.52       |
| 96     | Wabash, Chester & Western                              | 159,142.19      | 6,045.10       | 8,961.34       | 29,665.73    | 203,814.36      |
| 97     | Wisconsin Central Lines                                | .....           | .....          | .....          | .....        | .....           |
| Totals |  | \$14,211,044.93 | \$1,579,848.98 | \$1,479,541.07 | \$193,431.79 | \$17,463,866.77 |

(1) Estimated by office.



Table IV.—Total Earnings from Operation in Illinois—Continued.

| NAME OF COMPANY.                                   | FREIGHT DEPARTMENT. |                          |                                |  |                | Total earnings from operation. |
|--|---------------------|--------------------------|--------------------------------|--|----------------|--------------------------------|
|  | 6<br>From freights. | 7<br>From other sources. | 8<br>Total freight department. | 9<br>From other sources—Miscellaneous. | 10             |                                |
|  |                     |                          |                                |  |                |                                |
| 1 Atchison, Topeka & Santa Fe.....                 | \$1,983,619.43      | \$3,818.26               | \$1,987,437.69                 | \$70,677.22                            | \$2,530,668.77 | 1                              |
| 2 Baltimore & Ohio.....                            | 99,692.92           | 35                       | 99,693.27                      | .....                                  | 136,074.01     | 5                              |
| 7 Belt Railway of Chicago.....                     | 622,251.43          | 21,478.15                | 643,719.58                     | .....                                  | 643,719.58     | 7                              |
| 8 Centralia & Chester.....                         | 2,378.44            | .....                    | 2,378.44                       | .....                                  | 5,186.80       | 8                              |
| 9 Chicago & Alton.....                             | 4,016,918.68        | .....                    | 4,016,918.68                   | 37,949.58                              | 6,034,188.80   | 9                              |
| 12 Chicago & Atlantic.....                         | 140,276.76          | .....                    | 140,276.76                     | 7,991.65                               | 187,324.80     | 12                             |
| 13 Chicago & Calumet Terminal.....                 | .....               | .....                    | .....                          | 4,251.62                               | 4,251.62       | 13                             |
| 14 Chicago & Eastern Illinois.....                 | .....               | .....                    | .....                          | 46,154.61                              | 1,983,495.32   | 14                             |
| 17 Chicago & Grand Trunk.....                      | .....               | .....                    | .....                          | .....                                  | 432,901.32     | 17                             |
| 20 Chicago & Iowa.....                             | .....               | .....                    | .....                          | 22,745.99                              | 476,533.20     | 20                             |
| 21 Chicago & Northwestern.....                     | 2,739,981.66        | 2,571.02                 | 2,742,552.68                   | 16,366.73                              | 3,784,023.25   | 21                             |
| 22 Chicago & Ohio River.....                       | 54,096.13           | .....                    | 54,096.13                      | .....                                  | 70,319.26      | 22                             |
| 23 Chicago & Burlington & Northern.....            | 490,162.66          | .....                    | 490,162.66                     | .....                                  | 555,953.87     | 23                             |
| 25 Chicago, Burlington & Quincy.....               | 4,731,200.96        | 2,535.06                 | 4,733,736.02                   | 2,251.15                               | 6,777,221.98   | 25                             |
| 29 Chicago, Milwaukee & St. Paul.....              | 1,030,539.94        | 9,733.82                 | 1,040,273.76                   | 8,815.79                               | 1,487,809.95   | 29                             |
| 30 Chicago, Peoria & St. Louis.....                | 445,019.87          | .....                    | 445,019.87                     | .....                                  | 1,487,809.95   | 30                             |
| 34 Chicago, Rock Island & Pacific.....             | (a) 1,331,350.92    | .....                    | (a) 1,331,350.92               | (943,939.35)                           | 1,683,196.63   | 34                             |
| 36 Chicago, St. Louis & Pittsburgh.....            | 202,099.21          | .....                    | 202,099.21                     | .....                                  | 1,369,794.38   | 36                             |
| 37 Englewood Connecting.....                       | .....               | .....                    | .....                          | .....                                  | 256,253.97     | 37                             |
| 38 Chicago, St. Paul & Kansas City.....            | 1,010,543.53        | .....                    | 1,010,543.53                   | 3,124.78                               | 3,124.78       | 38                             |
| 39 Cleveland, Cincinnati, Chicago & St. Louis..... | 2,695,927.01        | 98,660.70                | 2,794,587.71                   | 28,391.39                              | 1,300,735.93   | 39                             |
| 42 Kankakee & Seneca.....                          | 48,150.00           | .....                    | 48,150.00                      | 88,944.50                              | 4,099,642.96   | 42                             |
| 43 Peoria & Eastern.....                           | 167,159.04          | 380.77                   | 167,539.81                     | 179.39                                 | 63,881.95      | 43                             |
| 45 East St. Louis & Carondelet.....                | 68,842.13           | .....                    | 68,842.13                      | 11,639.65                              | 80,481.78      | 45                             |
| 46 East St. Louis Connecting.....                  | 149,703.82          | .....                    | 149,703.82                     | .....                                  | 149,703.82     | 46                             |
| 48 Elgin, Joliet & Eastern.....                    | 422,707.25          | .....                    | 422,707.25                     | .....                                  | 440,792.94     | 48                             |
| 51 Fulton County Narrow Gauge.....                 | 27,589.30           | .....                    | 27,589.30                      | .....                                  | 47,059.43      | 51                             |
| 53 Grand Tower & Carbondale.....                   | 72,374.00           | .....                    | 72,374.00                      | .....                                  | 83,788.30      | 53                             |
| 54 Grand Tower & Cape Girardeau.....               | 11,550.18           | .....                    | 11,550.18                      | 967.62                                 | 14,018.55      | 54                             |
| 55 Illinois Central.....                           | 6,079,589.60        | 9,155.47                 | 6,088,745.07                   | .....                                  | 9,175,606.73   | 55                             |
| 65 Indiana & Illinois Southern.....                | 35,636.06           | .....                    | 35,636.06                      | .....                                  | 50,228.01      | 65                             |
| 66 Indianapolis, Decatur & Western.....            | 133,863.30          | 1,691.11                 | 135,554.41                     | 1,237.31                               | 218,198.62     | 66                             |

|     |   |                 |                 |              |                |              |
|-----|---|-----------------|-----------------|--------------|----------------|--------------|
| 67  | Indiana, Illinois & Iowa.....                               | 181,756 97      | 181,756 97      | .....        | 181,756 97     | 193,637 76   |
| 68  | Iowa Central.....   | 283,036 06      | 283,036 06      | .....        | 283,036 06     | 331,799 94   |
| 71  | Lake Erie & Western.....                                    | 539,170 47      | 539,170 47      | .....        | 539,170 47     | 590,519 94   |
| 72  | Lake Shore & Michigan Southern.....                         | 295,582 96      | 295,582 96      | .....        | 295,582 96     | 380,550 96   |
| 74  | Louisville & Nashville.....                                 | 604,367 52      | 604,367 52      | 22,129 24    | 626,496 76     | 1,019,546 26 |
| 76  | Louisville, Evansville & St. Louis, Consolidated.....       | 121,538 84      | 121,538 84      | .....        | 121,538 84     | 190,896 64   |
| 77  | Louisville, New Albany & Chicago.....                       | 153,601 52      | 153,601 52      | .....        | 153,601 52     | 190,896 64   |
| 78  | Michigan Central.....                                       | 335,205 86      | 335,205 86      | 1,451 39     | 336,657 25     | 405,593 42   |
| 80  | Mobile & Ohio.....  | 506,525 45      | 506,525 45      | .....        | 506,525 45     | 508,869 76   |
| 83  | New York, Chicago & St. Louis.....                          | 184,397 35      | 184,397 35      | .....        | 184,397 35     | 207,091 91   |
| 85  | Ohio & Mississippi.....                                     | 1,233,325 92    | 1,233,325 92    | .....        | 1,233,325 92   | 1,677,731 12 |
| 86  | Ohio, Indiana & Western.....                                | 160,864 39      | 160,864 39      | .....        | 160,864 39     | 270,436 94   |
| 87  | Pawnee.....   | 2,265 24        | 2,265 24        | .....        | 2,265 24       | 3,274 80     |
| 88  | Pennsylvania Co. (Op. Pittsburgh, Ft. Wayne & Chicago)..... | 290,722 37      | 290,722 37      | .....        | 290,722 37     | 306,993 92   |
| 88  | Pennsylvania Co. (Op. South Chicago & Southern).....        | 11,677 24       | 11,677 24       | .....        | 11,677 24      | 28,193 15    |
| 92  | Peoria & Pekin Union.....                                   | 40,819 19       | 40,819 19       | .....        | 40,819 19      | 405,658 75   |
| 93  | Peoria, Decatur & Evansville.....                           | 387,280 30      | 387,280 30      | .....        | 387,280 30     | 662,075 20   |
| 94  | Quincy, Omaha & Kansas City.....                            | 6,556 29        | 6,556 29        | .....        | 6,556 29       | 87,256 49    |
| 95  | Rock Island & Peoria.....                                   | 526,600 97      | 526,600 97      | .....        | 526,600 97     | 919 83       |
| 96  | St. Louis, Alton & Springfield.....                         | 72,884 57       | 72,884 57       | .....        | 72,884 57      | 9,777 68     |
| 98  | St. Louis, Alton & Terre Haute.....                         | 926,658 82      | 926,658 82      | .....        | 926,658 82     | 636,026 00   |
| 105 | St. Louis & Chicago.....                                    | 36,006 15       | 36,006 15       | .....        | 36,006 15      | 115,711 93   |
| 106 | St. Louis & Peoria.....                                     | 8,725 02        | 8,725 02        | .....        | 8,725 02       | 9,777 68     |
| 107 | Terminal Railroad Association of St. Louis.....             | 595,643 13      | 595,643 13      | .....        | 595,643 13     | 62,710 60    |
| 108 | Terre Haute & Indianapolis.....                             | 1,103,661 39    | 1,103,661 39    | .....        | 1,103,661 39   | 9,009 24     |
| 110 | Terre Haute & Peoria.....                                   | 240,161 04      | 240,161 04      | .....        | 240,161 04     | 815,750 08   |
| 111 | Toledo, Peoria & Western.....                               | 583,131 79      | 583,131 79      | .....        | 583,131 79     | 1,882,991 26 |
| 112 | Toledo, St. Louis & Kansas City.....                        | 371,451 50      | 371,451 50      | 12,763 32    | 384,214 82     | 340,277 73   |
| 114 | Wabash.....   | 3,086,017 51    | 3,086,017 51    | .....        | 3,086,017 51   | 904,980 50   |
| 115 | Wabash, Chester & Western.....                              | 408,332 51      | 408,332 51      | 51,488 09    | 460,820 60     | 438,014 96   |
| 116 | Wisconsin Central Lines.....                                | 498,332 51      | 498,332 51      | 2,738 13     | 501,070 64     | 4,450,957 47 |
|     | Totals.....   | \$43,856,706 08 | \$44,133,597 31 | \$276,891 23 | \$1,892,789 23 | 61,327 26    |
|     |   |                 |                 |              |                | 116          |

(1) Estimated by office.

TABLE V. *Total Earnings and Income in Illinois for year ending June 30, 1890.*

| NAME OF COMPANY.   | 1                              | 2                        | 3                          | 4                                   | 5                                      |
|--|--------------------------------|--------------------------|----------------------------|-------------------------------------|--|
|  | Gross earnings from operation. | Interest on bonds owned. | Dividends on stocks owned. | Miscellaneous income less expenses. | Total earnings and income in Illinois. |
| 1 Atchison, Topeka & Santa Fe.....                       | \$2,520,668 77                 |                          |                            | \$2,033 10                          | \$2,522,701 87                         |
| 5 Baltimore & Ohio.....                                  | 136,674 01                     |                          |                            |                                     | 136,674 01                             |
| 7 Belt Railway of Chicago.....                           | 643,719 58                     |                          |                            |                                     | 643,719 58                             |
| 8 Centralia & Chester.....                               | 5,186 89                       |                          |                            |                                     | 5,186 89                               |
| 9 Chicago & Alton.....                                   | 6,034,688 80                   | \$233,290 00             | \$32,032 00                | 7,949 28                            | 6,307,960 08                           |
| 12 Chicago & Atlantic.....                               | 187,524 86                     |                          | 2,100 00                   | 94 49                               | 189,719 35                             |
| 13 Chicago & Calumet Terminal.....                       | 4,251 62                       |                          |                            |                                     | 4,251 62                               |
| 14 Chicago & Calumet Terminal.....                       | 1,963,455 52                   | 536 80                   | 26,661 85                  | 1,093 50                            | 1,991,187 67                           |
| 17 Chicago & Eastern Illinois.....                       | 432,901 32                     |                          |                            | 10,017 55                           | 442,918 87                             |
| 20 Chicago & Grand Trunk.....                            | 476,533 10                     |                          |                            |                                     | 476,533 10                             |
| 21 Chicago & Iowa.....                                   | 3,784,023 25                   | 63 22                    | 29,827 70                  | 26,646 24                           | 3,840,560 41                           |
| 23 Chicago & Northwestern.....                           | 70,319 26                      |                          |                            |                                     | 70,319 26                              |
| 24 Chicago & Ohio River.....                             | 535,953 87                     |                          |                            |                                     | 535,953 87                             |
| 25 Chicago, Burlington & Northern.....                   | 6,777,221 98                   |                          |                            |                                     | 6,777,221 98                           |
| 29 Chicago, Burlington & Quincy.....                     | 1,487,809 95                   | 1,820 93                 | 3,258 00                   | 6,557 38                            | 1,499,456 25                           |
| 30 Chicago, Milwaukee & St. Paul.....                    | 683,196 03                     |                          |                            | 62,853 70                           | 746,049 73                             |
| 34 Chicago, Peoria & St. Louis.....                      | 1,939,794 38                   | (1) 5,643 51             | (1) 5,643 51               | (1) 155,584 51                      | (2) 0,101,551 98                       |
| 35 Chicago, Rock Island & Pacific.....                   | 285,233 97                     | (1) 529 58               |                            |                                     | 285,233 97                             |
| 37 Chicago, St. Louis & Pittsburgh.....                  | 3,124 78                       |                          |                            |                                     | 3,124 78                               |
| 38 Chicago, St. Paul & Kansas City.....                  | 1,300,775 03                   |                          |                            |                                     | 1,300,775 03                           |
| 39 Cleveland, Cincinnati, Chicago & St. Louis.....       | 4,090,642 90                   | 13,520 80                | 7,328 99                   | 143 63                              | 4,120,636 38                           |
| 42 Kankakee & Seneca.....                                | 63,881 95                      |                          |                            |                                     | 63,881 95                              |
| 43 Peoria & Eastern.....                                 | 297,093 26                     |                          |                            |                                     | 297,093 26                             |
| 45 East St. Louis & Carondelet.....                      | 80,181 78                      |                          |                            |                                     | 80,181 78                              |
| 46 East St. Louis Connecting.....                        | 147,703 82                     |                          |                            | 75 00                               | 153,086 57                             |
| 48 Elgin, Joliet & Eastern.....                          | 440,732 94                     |                          |                            | 3,882 75                            | 506,198 60                             |
| 51 Fulton County Narrow Gauge.....                       | 47,639 43                      |                          |                            | 65,405 66                           | 47,639 43                              |
| 53 Grand Tower & Carbonale.....                          | 83,788 90                      |                          |                            |                                     | 83,788 90                              |
| 54 Grand Tower & Cape Girardeau.....                     | 14,018 55                      |                          |                            |                                     | 14,018 55                              |
| 55 Illinois Central.....                                 | 9,175,606 73                   | 231,839 26               | 181,380 32                 | 69,832 47                           | 9,658,658 78                           |
| 56 Indiana & Illinois Southern.....                      | 50,228 01                      |                          |                            |                                     | 50,228 01                              |
| 60 Indianapolis, Decatur & Western.....                  | 218,198 62                     |                          |                            |                                     | 218,198 62                             |
| 67 Indiana, Illinois & Iowa.....                         | 193,637 76                     |                          |                            |                                     | 193,637 76                             |
| 68 Iowa Central.....                                     | 331,799 24                     |                          |                            |                                     | 331,799 24                             |
| 71 Lake Erie & Western.....                              | 599,519 94                     |                          |                            |                                     | 599,519 94                             |
| 72 Lake Shore & Michigan Southern.....                   | 380,530 96                     | 674 82                   | 5,429 81                   |                                     | 404,604 52                             |
| 74 Louisville & Nashville.....                           | 1,019,546 20                   |                          |                            | 77,968 90                           | 1,019,546 20                           |
| 76 Louisville, Evansville & St. Louis, Consolidated..... | 1,019,546 20                   |                          |                            |                                     | 1,019,546 20                           |
| 77 Louisville, New Albany & Chicago.....                 | 95,533 42                      |                          | 1,100 00                   | 4,005 42                            | 96,638 42                              |

|  |                 |              |              |       |                |                 |     |
|--|-----------------|--------------|--------------|-------|----------------|-----------------|-----|
| 78 Michigan Central .....                                | 508,809 76      | 90 19        | 11,770 38    | ..... | .....          | 520,730 33      | 78  |
| 80 Mobile & Ohio .....                                   | 727,094 91      | .....        | .....        | ..... | .....          | 727,094 91      | 80  |
| 82 New York Chicago & St. Louis .....                    | 199,731 12      | .....        | .....        | ..... | .....          | 200,051 88      | 82  |
| 83 Ohio & Mississippi .....                              | 2,059,442 31    | .....        | .....        | ..... | .....          | 2,059,867 76    | 83  |
| 86 Ohio, Indiana & Western .....                         | 276,956 94      | .....        | .....        | ..... | .....          | 276,956 94      | 86  |
| 87 Pawnee .....  | 3,274 80        | .....        | .....        | ..... | .....          | 3,274 80        | 87  |
| 88 Pennsylvania Co. (Op. Pittsburgh, Ft. Wayne & Chic.)  | 366,993 92      | .....        | .....        | ..... | .....          | 437,377 36      | 88  |
| 88 Pennsylvania Co. (Op. South Chicago & Southern) ..... | 28,193 15       | .....        | .....        | ..... | .....          | 28,193 15       | 88  |
| 92 Peoria & Pekin Union .....                            | 462,683 80      | .....        | .....        | ..... | .....          | 462,683 80      | 92  |
| 93 Peoria, Decatur & Evansville .....                    | 632,075 90      | .....        | .....        | ..... | .....          | 632,075 90      | 93  |
| 94 Quincy, Omaha & Kansas City .....                     | 9,777 68        | .....        | .....        | ..... | .....          | 10,958 70       | 94  |
| 95 Rock Island & Peoria .....                            | 656,026 00      | .....        | 640 00       | ..... | .....          | 656,026 00      | 95  |
| 96 St. Louis, Alton & Springfield .....                  | 105,713 93      | .....        | .....        | ..... | .....          | 115,711 93      | 96  |
| 98 St. Louis, Alton & Terre Haute .....                  | 1,207,202 80    | .....        | .....        | ..... | .....          | 1,651,604 37    | 98  |
| 103 St. Louis & Chicago .....                            | 62,710 00       | .....        | .....        | ..... | .....          | 62,710 00       | 103 |
| 106 St. Louis & Peoria .....                             | 3,003 24        | .....        | .....        | ..... | .....          | 3,003 24        | 106 |
| 107 Terminal Railroad Association of St. Louis .....     | 815,750 08      | .....        | .....        | ..... | .....          | 806,121 33      | 107 |
| 108 Terre Haute & Indianapolis .....                     | 1,852,491 26    | .....        | .....        | ..... | .....          | 1,852,491 26    | 108 |
| 110 Terre Haute & Peoria .....                           | 340,277 73      | .....        | .....        | ..... | .....          | 340,277 73      | 110 |
| 111 Toledo, Peoria & Western .....                       | 904,980 56      | .....        | .....        | ..... | .....          | 938,830 50      | 111 |
| 112 Toledo, St. Louis & Kansas City .....                | 438,014 96      | .....        | .....        | ..... | .....          | 438,014 96      | 112 |
| 114 Wabash .....   | 4,450,957 47    | .....        | 17,000 00    | ..... | .....          | 4,541,768 97    | 114 |
| 115 Wabash, Chester & Western .....                      | 61,327 26       | .....        | .....        | ..... | .....          | 61,327 26       | 115 |
| 116 Wisconsin Central Lines .....                        | 614,991 43      | .....        | .....        | ..... | .....          | 614,991 43      | 116 |
| Totals .....   | \$63,490,233 31 | \$182,365 60 | \$323,582 08 | ..... | \$1,175,233 22 | \$65,471,494 81 |     |

(1) Estimated by office.

TABLE VI.—Operating Expenses in Illinois for year ending June 30, 1890.

| NAME OF COMPANY.                                   | CHARGEABLE TO PASSENGER TRAFFIC.   |                           |                            |                   |              |
|--|------------------------------------|---------------------------|----------------------------|-------------------|--------------|
|  | 1                                  | 2                         | 3                          | 4                 | 5            |
|  | CHARGEABLE TO PASSENGER TRAFFIC.   |                           |                            |                   |              |
|  | Maintenance of way and structures. | Maintenance of equipment. | Conducting transportation. | General expenses. | Total.       |
| 1 Atchison, Topeka & Santa Fe.....                 | \$103,340 55                       | \$55,307 67               | \$318,839 31               | \$76,830 31       | \$554,317 84 |
| 5 Baltimore & Ohio.....                            | 3,185 89                           | 4,932 69                  | 16,914 32                  | 3,295 65          | 23,298 55    |
| 7 Belt Railway of Chicago.....                     |                                    |                           |                            |                   |              |
| 8 Centralia & Chester.....                         | 962 33                             | 56 30                     | 2,005 92                   |                   | 3,024 55     |
| 9 Chicago & Alton.....                             | 280,284 62                         | 170,721 29                | 554,150 43                 | 196,314 02        | 1,201,470 36 |
| 10 Chicago & Atlantic.....                         | 6,970 24                           | 2,568 93                  | 19,646 81                  | 5,752 81          | 34,938 82    |
| 12 Chicago & Calumet Terminal.....                 |                                    |                           |                            |                   |              |
| 13 Chicago & Eastern Illinois.....                 | 78,863 29                          | 43,050 24                 | 222,535 08                 | 47,403 60         | 391,852 21   |
| 14 Chicago & Grand Trunk.....                      | 11,813 63                          | 16,485 82                 | 56,981 89                  | 14,212 33         | 99,493 67    |
| 17 Chicago & Iowa.....                             | 13,215 15                          | 20,622 82                 | 67,977 59                  | 9,377 49          | 111,193 05   |
| 20 Chicago & Northwestern.....                     | 159,484 52                         | 84,329 53                 | 412,891 47                 | 65,119 44         | 721,854 96   |
| 21 Chicago & Ohio River.....                       | 5,916 51                           | 1,570 91                  | 4,448 63                   | 11,719 42         | 23,655 47    |
| 24 Chicago, Burlington & Northern.....             | 24,674 92                          | 12,110 49                 | 80,601 25                  | 26,627 26         | 144,013 92   |
| 25 Chicago, Burlington & Quincy.....               | 288,891 77                         | 255,607 01                | 750,813 33                 | 144,227 33        | 1,439,539 44 |
| 26 Chicago, Milwaukee & St. Paul.....              | 66,038 00                          | 44,292 35                 | 143,096 22                 | 39,438 18         | 292,864 75   |
| 30 Chicago, Peoria & St. Louis.....                | 32,848 01                          | 22,220 88                 | 52,553 93                  | 15,777 27         | 123,400 09   |
| 31 Chicago, Rock Island & Pacific.....             | 108,011 52 (1)                     | 67,078 48 (1)             | 256,492 61 (1)             | 57,115 63 (1)     | 488,698 24   |
| 34 Chicago, St. Louis & Pittsburgh.....            | 13,146 02                          | 12,353 83                 | 28,437 28                  | 3,636 38          | 57,573 51    |
| 37 Englewood Connecting.....                       |                                    |                           |                            |                   |              |
| 38 Chicago, St. Paul & Kansas City.....            | 31,277 69                          | 19,178 14                 | 107,319 89                 | 64,397 81         | 222,173 53   |
| 39 Cleveland, Cincinnati, Chicago & St. Louis..... | 183,637 65                         | 152,662 77                | 411,501 63                 | 870,409 91        | 1,568,212 96 |
| 40 East St. Louis & Carondelet.....                | 189,087 42                         | 1,801 29                  | 8,300 46                   | 1,989 92          | 13,181 09    |
| 42 East St. Louis & Eastern.....                   | 4,100 63                           | 11,856 92                 | 20,914 65                  | 3,224 31          | 40,126 51    |
| 43 Peoria & Eastern.....                           |                                    |                           |                            |                   |              |
| 45 East St. Louis & Carondelet.....                |                                    |                           |                            |                   |              |
| 46 East St. Louis Connecting.....                  | 7,719 27                           | 1,748 85                  | 12,011 69                  | 4,020 82          | 25,100 63    |
| 48 Elgin, Joliet & Eastern.....                    | 7,005 73                           | 2,416 83                  | 4,659 41                   | 2,416 97          | 15,528 94    |
| 51 Fulton County, New York & Chicago.....          | 7,237 67                           | 2,209 98                  | 6,269 16                   | 602 77            | 16,253 58    |
| 52 Grand Tower & Carondelet.....                   | 970 09                             | 852 36                    | 2,878 71                   | 389 45            | 5,090 81     |
| 53 Illinois Central.....                           | 484,903 63                         | 298,719 43                | 885,596 74                 | 176,469 18        | 1,785,284 98 |
| 55 Indiana & Illinois Southern.....                | 2,656 15                           | 1,280 69                  | 6,368 58                   | 1,396 59          | 11,702 01    |
| 56 Indianapolis, Decatur & Western.....            | 24,845 18                          | 9,058 49                  | 34,119 32                  | 21,795 36         | 89,818 35    |
| 57 Indiana, Illinois & Iowa.....                   | 3,514 15                           | 1,391 55                  | 5,391 12                   | 2,793 49          | 12,910 31    |
| 58 Iowa Central.....                               | 33,575 43                          | 8,225 28                  | 29,660 32                  | 14,371 62         | 85,832 65    |
| 61 Lake Erie & Western.....                        | 28,126 96                          | 16,013 51                 | 65,733 85                  | 13,899 34         | 123,773 66   |



|   |                |                |                |                |                 |     |
|---|----------------|----------------|----------------|----------------|-----------------|-----|
| 72 Lake Shore & Michigan Southern.....                          | 24,384 11      | 15,182 02      | 47,872 85      | 8,179 95       | 95,618 93       | 72  |
| 74 Louisville & Nashville.....                                  | 57,498 73      | 28,073 56      | 92,470 21      | 35,349 44      | 213,301 94      | 74  |
| 76 Louisville, Evansville & St. Louis, Consolidated             | 11,152 70      | 5,672 67       | 20,035 04      | 6,503 30       | 43,363 71       | 76  |
| 77 Louisville, New Albany & Chicago.....                        | 5,101 65       | 2,747 55       | 9,340 47       | 3,642 88       | 20,832 55       | 77  |
| 78 Michigan Central.....  | 30,043 12      | 24,909 31      | 66,986 12      | 14,546 52      | 136,485 07      | 78  |
| 80 Mobile & Ohio.....   | 47,421 47      | 13,901 93      | 74,023 48      | 20,549 05      | 155,895 93      | 80  |
| 83 New York, Chicago & St. Louis.....                           | 3,510 04       | 1,354 74       | 5,957 60       | 1,799 85       | 12,622 23       | 83  |
| 85 Ohio & Mississippi.....                                      | 144,103 15     | 77,986 29      | 289,001 50     | 72,101 16      | 583,192 10      | 85  |
| 86 Ohio, Indiana & Western.....                                 | 32,013 01      | 16,510 86      | 41,851 22      | 11,573 75      | 101,948 84      | 86  |
| 87 Pawnee.....  | 75 24          | 149 86         | 382 24         | 93 75          | 651 09          | 87  |
| 88 Pennsylvania Co. (Operating Pittsburgh, Ft. Wayne & Chicago) | 16,386 26      | 11,570 20      | 29,729 91      | 3,824 76       | 61,511 13       | 88  |
| 89 Pennsylvania Co. (Operating South Chicago & Southern)        | 2,081 63       | 912 93         | 10,557 36      | 176 96         | 13,758 88       | 89  |
| 92 Peoria & Pekin Union.....                                    | 13,963 70      | 7,210 89       | 40,427 15      | 7,522 74       | 69,124 48       | 92  |
| 93 Peoria, Decatur & Evansville.....                            | 45,473 84      | 14,025 94      | 48,384 00      | 17,535 87      | 125,419 65      | 93  |
| 94 Quincy, Omaha & Kansas City.....                             | 439 03         | 92 61          | 713 70         | 400 07         | 1,705 41        | 94  |
| 95 Rock Island & Peoria.....                                    | 30,060 26      | 9,310 41       | 33,163 08      | 16,504 91      | 88,978 66       | 95  |
| 96 St. Louis, Alton & Springfield.....                          | 5,568 33       | 3,025 55       | 11,410 47      | 6,877 43       | 26,881 78       | 96  |
| 98 St. Louis, Alton & Terre Haute.....                          | 57,784 18      | 31,212 16      | 98,790 34      | 26,163 95      | 213,950 63      | 98  |
| 103 St. Louis & Chicago.....                                    | 6,229 53       | 1,691 62       | 13,310 06      | 6,853 46       | 28,114 67       | 103 |
| 106 St. Louis & Peoria.....                                     | 15,603 83      | 9,740 12       | 37,443 18      | 6,161 76       | 68,948 89       | 106 |
| 107 Terminal Railroad Association of St. Louis                  | 84,578 27      | 44,097 34      | 228,133 15     | 37,036 38      | 393,845 11      | 107 |
| 110 Terre Haute & Indianapolis.....                             | 14,162 82      | 4,980 34       | 21,041 07      | 17,497 06      | 61,681 59       | 110 |
| 111 Toledo, Peoria & Western.....                               | 57,061 92      | 23,896 71      | 90,448 63      | 31,313 33      | 203,630 59      | 111 |
| 112 Toledo, St. Louis & Kansas City.....                        | 14,352 30      | 7,248 21       | 28,767 23      | 8,863 03       | 59,231 27       | 112 |
| 114 Wabash, St. Louis & Kansas City.....                        | 225,015 82     | 108,188 21     | 443,692 86     | 102,938 11     | 989,743 00      | 114 |
| 115 Wabash, Chester & Western.....                              | 11,900 56      | 7,084 74       | 8,717 12       | 2,917 46       | 24,028 92       | 115 |
| 116 Wisconsin Central Lines.....                                | 8,430 50       | 7,355 60       | 84,831 53      | 16,071 56      | 66,089 19       | 116 |
| Totals.....   | \$2,990,609 62 | \$1,811,827 70 | \$6,420,423 08 | \$1,614,385 31 | \$12,837,246 31 |     |

(1) Estimated by office.

Table VI.—Operating Expenses in Illinois—Continued.

| NAME OF COMPANY.                                      |  |                               |                      |              |                | CHARGEABLE TO FREIGHT TRAFFIC. |  |  |  |  |  | Grand total operating ex-<br>penses in Ill. |
|---|--|-------------------------------|----------------------|--------------|----------------|--------------------------------|--|--|--|--|--|---|
|   |  |                               |                      |              |                |                                |  |  |  |  |  |   |
| 6   | 7  | 8                             | 9                    | 10           | 11             |                                |  |  |  |  |  |   |
| Maintenance <sup>3</sup><br>of way and<br>structures. | Maintenance<br>of equipment.               | Conducting<br>transportation. | General<br>expenses. | Total.       |                |                                |  |  |  |  |  |   |
| 1   | \$212,985 45                               | \$201,638 35                  | \$865,569 74         | \$103,142 36 | \$1,243,335 90 | \$1,797,653 74                 |  |  |  |  |  |   |
| 5   | 9,557 68                                   | 14,798 08                     | 50,832 98            | 9,616 96     | 84,806 70      | 113,074 25                     |  |  |  |  |  |   |
| 7   | 71,546 49                                  | 59,315 52                     | 246,559 70           | 32,520 47    | 409,942 18     | 409,942 18                     |  |  |  |  |  |   |
| 8   | 962 33                                     |                               | 2,005 92             |              | 2,968 25       | 5,992 80                       |  |  |  |  |  |   |
| 9   | 459,584 45                                 | 367,396 96                    | 1,040,985 06         | 267,579 43   | 2,135,545 90   | 3,337,016 26                   |  |  |  |  |  |   |
| 12  | 15,490 87                                  | 9,583 91                      | 62,827 93            | 98,907 91    | 133,906 73     | 133,906 73                     |  |  |  |  |  |   |
| 13  | 431 11                                     | 536 73                        | 9,221 33             | 3,895 26     | 3,895 26       | 13                             |  |  |  |  |  |   |
| 14  | 108,668 39                                 | 122,580 01                    | 420,928 43           | 62,796 37    | 714,973 70     | 1,106,825 91                   |  |  |  |  |  |   |
| 17  | 21,000 74                                  | 27,979 08                     | 120,750 28           | 17,988 25    | 187,718 35     | 287,212 02                     |  |  |  |  |  |   |
| 19  | 13,778 41                                  | 20,681 82                     | 100,008 98           | 8,628 21     | 143,097 42     | 254,290 47                     |  |  |  |  |  |   |
| 20  | Chicago & Iowa                             | 275,526 35                    | 872,639 32           | 132,975 46   | 1,630,971 64   | 2,352,616 00                   |  |  |  |  |  |   |
| 21  | Chicago & Northwestern                     | 1,036 01                      | 15,679 22            | 8,350 11     | 45,814 87      | 60,534 29                      |  |  |  |  |  |   |
| 22  | Chicago & Ohio River                       | 24,343 23                     | 127,953 41           | 33,646 80    | 219,812 25     | 303,826 17                     |  |  |  |  |  |   |
| 23  | Chicago, Burlington & Northern             | 91,373 68                     | 371,617 13           | 271,617 13   | 2,713,959 31   | 4,153,498 75                   |  |  |  |  |  |   |
| 24  | Chicago, Burlington & Quincy               | 546,994 07                    | 525,698 59           | 525,698 59   | 622,288 61     | 993,600 33                     |  |  |  |  |  |   |
| 25  | Chicago, Milwaukee & St. Paul              | 109,290 38                    | 360,327 08           | 47,331 83    | 370,290 33     | 493,600 42                     |  |  |  |  |  |   |
| 29  | Chicago, Peoria & St. Louis                | 66,692 45                     | 157,661 90           | 88,587 13    | 800,201 81     | 1,288,900 08                   |  |  |  |  |  |   |
| 30  | Chicago, Rock Island & Pacific             | 118,018 89                    | 427,363 03           | 6,557 47     | 152,373 96     | 209,832 47                     |  |  |  |  |  |   |
| 31  | Chicago, St. Louis & Pittsburgh            | 38,736 42                     | 84,087 17            |              | 1,309 43       | 1,809 93                       |  |  |  |  |  |   |
| 37  | Englewood Connecting                       |                               | 483,145 47           | 62,830 32    | 731,817 19     | 953,900 72                     |  |  |  |  |  |   |
| 38  | Chicago, St. Paul & Kansas City            | 72,804 12                     | 363,354 77           | 203,431 06   | 1,735,370 88   | 2,623,389 79                   |  |  |  |  |  |   |
| 39  | Cleveland, Cincinnati, Chicago & St. Louis | 314,376 01                    | 10,426 75            | 3,006 92     | 49,384 88      | 62,365 97                      |  |  |  |  |  |   |
| 42  | Kankakee & Seneca                          | 5,146 35                      | 79,061 53            | 12,664 88    | 137,838 67     | 177,465 18                     |  |  |  |  |  |   |
| 43  | Peoria & Eastern                           | 25,647 85                     | 27,788 91            | 7,360 57     | 55,288 06      | 55,288 06                      |  |  |  |  |  |   |
| 45  | East St. Louis & Carondelet                | 7,118 74                      | 81,551 10            | 6,944 00     | 140,633 17     | 140,633 17                     |  |  |  |  |  |   |
| 46  | East St. Louis Connecting                  | 25,064 42                     | 130,373 37           | 33,407 06    | 246,192 68     | 272,293 31                     |  |  |  |  |  |   |
| 48  | Elgin, Joliet & Eastern                    | 28,437 39                     | 9,318 52             | 4,761 94     | 32,331 75      | 47,703 69                      |  |  |  |  |  |   |
| 51  | Fulton County Narrow Gauge                 | 4,142 49                      | 9,318 52             | 1,125 12     | 50,210 96      | 66,464 54                      |  |  |  |  |  |   |
| 53  | Grand Tower & Carbondale                   | 8,391 68                      | 27,261 54            | 4,222 12     | 8,484 44       | 13,575 25                      |  |  |  |  |  |   |
| 54  | Grand Tower & Cape Girardeau               | 1,650 94                      | 1,869 10             |              | 3,634,066 90   | 5,419,351 88                   |  |  |  |  |  |   |
| 55  | Illinois Central                           | 578,597 07                    | 1,941,689 30         | 251,718 87   | 25,000 70      | 36,702 71                      |  |  |  |  |  |   |
| 63  | Indiana & Illinois Southern                | 3,801 07                      | 11,743 18            | 3,258 75     | 17,016 22      | 169,834 57                     |  |  |  |  |  |   |
| 66  | Indianapolis, Decatur & Western            | 17,071 59                     | 23,750 32            | 8,531 06     | 135,122 36     | 148,632 67                     |  |  |  |  |  |   |
| 67  | Indiana, Illinois & Iowa                   | 11,477 71                     | 65,009 36            | 27,007 94    | 199,189 10     | 285,021 75                     |  |  |  |  |  |   |
| 68  | Iowa Central                               | 24,380 55                     | 92,302 44            | 21,018 37    | 172,531 81     | 296,305 47                     |  |  |  |  |  |   |
| 69  | Lake Erie & Western                        | 39,708 21                     | 90,166 86            | 18,971 70    |                |                                |  |  |  |  |  |   |

|   |                |                |                 |                |                 |                 |     |
|---|----------------|----------------|-----------------|----------------|-----------------|-----------------|-----|
| 72 Lake Shore & Michigan Southern.....                | 48,726 77      | 61,252 02      | 113,220 51      | 15,128 58      | 238,327 88      | 335,946 81      | 72  |
| 73 Louisville & Nashville.....                        | 94,183 75      | 90,250 06      | 230,058 19      | 47,735 71      | 462,227 71      | 675,619 65      | 74  |
| 76 Louisville, Evansville & St. L., Consolidated..... | 16,182 36      | 12,207 85      | 38,096 49       | 8,084 28       | 74,570 98       | 117,934 69      | 76  |
| 77 Louisville, New Albany & Chicago.....              | 5,775 53       | 5,775 53       | 22,521 71       | 6,045 25       | 40,144 97       | 60,977 52       | 77  |
| 78 Michigan Central.....                              | 45,366 32      | 37,614 05      | 101,151 71      | 27,341 01      | 211,473 09      | 347,958 16      | 78  |
| 80 Mobile & Ohio.....                                 | 78,403 13      | 52,443 77      | 213,900 56      | 37,718 30      | 382,501 76      | 538,400 69      | 80  |
| 83 New York, Chicago & St. Louis.....                 | 29,154 91      | 18,746 67      | 78,577 62       | 12,845 98      | 131,947 41      | 151,947 41      | 83  |
| 85 Ohio & Mississippi.....                            | 182,563 07     | 119,866 87     | 371,157 65      | 88,843 64      | 762,370 85      | 1,345,562 05    | 85  |
| 86 Ohio, Indiana & Western.....                       | 27,753 14      | 29,692 87      | 371,411 86      | 9,617 25       | 121,475 83      | 223,424 67      | 86  |
| 87 Pawnee.....  | 27,925 72      | 40,449 50      | 54,906 74       | 281 25         | 1,953 30        | 2,604 30        | 87  |
| 88 Pennsylvania Co. (Operating P. W. & C.).....       | 27,179 12      | 40,198 20      | 93,541 99       | 6,498 32       | 167,917 73      | 229,428 86      | 88  |
| 88 Pennsylvania Co. (Op. S. Chicago & Southern)       | 1,278 21       | 6,532 47       | 6,723 29        | 78 10          | 8,645 69        | 22,402 57       | 88  |
| 92 Peoria & Pekin Union.....                          | 41,691 11      | 21,632 70      | 121,281 48      | 22,568 24      | 207,373 53      | 276,498 01      | 92  |
| 93 Peoria, Decatur & Evansville.....                  | 44,351 65      | 50,122 25      | 114,382 52      | 10,009 23      | 228,378 65      | 353,798 30      | 93  |
| 94 Quincy, Omaha & Kansas City.....                   | 1,371 10       | 2,773 31       | 12,111 13       | 1,389 34       | 5,116 30        | 6,821 71        | 94  |
| 95 Rock Island & Peoria.....                          | 48,693 90      | 30,748 31      | 114,515 03      | 25,318 62      | 240,805 16      | 302,784 92      | 95  |
| 96 St. Louis, Alton & Springfield.....                | 16,704 49      | 3,076 06       | 31,251 21       | 20,632 31      | 89,645 27       | 107,527 05      | 96  |
| 98 St. Louis, Alton & Terre Haute.....                | 97,665 39      | 102,204 67     | 193,537 54      | 42,327 36      | 435,163 46      | 643,416 09      | 98  |
| 105 St. Louis & Chicago.....                          | 4,106 88       | 2,222 01       | 10,477 89       | 6,663 52       | 22,840 30       | 50,454 97       | 105 |
| 106 St. Louis & Peoria.....                           | 4,014 66       | 773 88         | 12,772 57       | 4,383 30       | 12,550 20       | 12,550 20       | 106 |
| 107 Terminal Railroad Association of St. Louis ..     | 43,473 57      | 30,254 32      | 175,454 99      | 18,484 28      | 273,669 46      | 342,618 63      | 107 |
| 108 Terre Haute & Indianapolis.....                   | 43,000 23      | 142,073 29     | 437,600 65      | 58,212 27      | 780,335 84      | 1,174,240 98    | 108 |
| 110 Terre Haute & Peoria.....                         | 42,488 48      | 14,941 02      | 73,123 20       | 52,491 18      | 185,045 88      | 246,725 17      | 110 |
| 111 Toledo, Peoria & Western ..                       | 84,136 42      | 79,163 55      | 238,402 62      | 48,269 33      | 449,971 32      | 635,551 91      | 111 |
| 112 Toledo, St. Louis & Kansas City.....              | 39,646 76      | 28,133 60      | 126,441 22      | 38,656 48      | 226,878 06      | 286,109 53      | 112 |
| 114 Wabash.....                                       | 422,577 98     | 457,928 11     | 1,281,454 75    | 119,703 22     | 2,281,661 06    | 3,224,407 60    | 114 |
| 115 Wabash, Chester & Western.....                    | 8,148 79       | 4,016 45       | 7,902 44        | 1,981 00       | 22,048 68       | 46,677 60       | 115 |
| 116 Wisconsin Central Lines.....                      | 31,608 60      | 20,084 77      | 76,346 79       | 19,418 66      | 141,518 82      | 208,208 01      | 116 |
| Totals .....  | \$5,452,657 91 | \$4,500,129 18 | \$14,437,094 27 | \$2,082,766 63 | \$27,222,647 99 | \$40,059,894 30 |     |

(1) Estimated by office.

TABLE VII.—Operating Expenses, Taxes and Average Earnings per mile of road, in Illinois, for year ending June 30, 1880.

|    | NAME OF COMPANY.                                | 1              | 2                  | 3            | 4                       | 5                             | 6                     | 7                           | 8   | 9                      | 10                         | 11                   |
|----|---|----------------|--------------------|--------------|-------------------------|-------------------------------|-----------------------|-----------------------------|---|------------------------|----------------------------|----------------------|
|    |   |                |                    |              |                         |                               |                       |                             |   |                        |                            |                      |
|    |   |                | Operating expenses | Taxes.....   | Passenger per mile..... | Passenger per train mile..... | Freight per mile..... | Freight per train mile..... | Gross transportation earnings per mile, including mail, express, etc. . | Expenses per mile..... | Net earnings per mile..... | Net loss per mile... |
| 1  | Atchison, Topeka & Santa Fe.....                | \$1,797,633 74 | 71 32              | \$112,197 79 | \$1,569 10              | \$0.723                       | \$6,741 88            | \$1,558                     | \$8,550 72  | \$6,008 08             | \$2,452 64                 | 1                    |
| 2  | Baltimore & Ohio.....                           | 113,074 25     | 82 73              | 14,512 28    | 2,163 68                | .496                          | 6,967 24              | .885                        | 9,551 75  | 7,902 43               | 1,649 32                   | 5                    |
| 3  | Belt Railway of Chicago (3).....                | 409,342 18     | 64 00              | 28,000 00    | 2,163 68                | .496                          | 6,967 24              | .885                        | 9,551 75  | 7,902 43               | 1,649 32                   | 7                    |
| 4  | Centralia & Chester.....                        | 3,352 80       | 115 00             | 186,403 13   | 2,963 74                | 1.178                         | 6,854 10              | 1.690                       | 10,252 25   | 5,665 98               | 4,586 31                   | 8                    |
| 5  | Chicago & Alton.....                            | 3,357 016 26   | 55 25              | 31,635 28    | 1,779 30                | .690                          | 7,449 64              | 1.370                       | 9,674 54  | 7,111 35               | 2,563 19                   | 9                    |
| 6  | Chicago & Atlantic.....                         | 133,906 73     | 71 41              | 186,403 13   | 2,963 74                | 1.178                         | 6,854 10              | 1.690                       | 10,252 25   | 5,665 98               | 4,586 31                   | 12                   |
| 7  | Chicago & Calumet Terminal (3).....             | 3,865 26       | 91 60              | 74,075 82    | 2,027 80                | .816                          | 6,943 30              | 2.017                       | 9,466 01  | 5,461 45               | 4,004 56                   | 13                   |
| 8  | Chicago & Grand Trunk.....                      | 1,106,825 91   | 57 73              | 74,075 82    | 2,027 80                | .816                          | 6,943 30              | 2.017                       | 9,466 01  | 5,461 45               | 4,004 56                   | 14                   |
| 9  | Chicago & Eastern Illinois.....                 | 257,212 02     | 66 35              | 41,110 57    | 4,410 24                | .620                          | 9,254 15              | 1.110                       | 14,124 02   | 9,370 70               | 4,753 32                   | 17                   |
| 10 | Chicago & Iowa.....                             | 234,290 47     | 53 36              | 16,556 87    | 1,118 02                | .502                          | 2,852 66              | 1.450                       | 4,582 05  | 2,445 10               | 2,136 95                   | 18                   |
| 11 | Chicago & Northwestern.....                     | 2,352,616 60   | 62 17              | 183,485 80   | 1,718 49                | 1.044                         | 4,677 88              | 1.371                       | 6,454 29  | 4,012 75               | 2,441 51                   | 19                   |
| 12 | Chicago & Ohio River.....                       | 60,531 29      | 86 08              | 7,752 78     | 111 53                  | .685                          | 3,629 02              | 1.294                       | 829 69  | 783 89                 | 116 80                     | 21                   |
| 13 | Chicago, Burlington & Northern.....             | 363,826 17     | 68 17              | 20,884 01    | 798 27                  | .682                          | 3,904 18              | 1.917                       | 4,864 35  | 3,302 10               | 1,562 25                   | 22                   |
| 14 | Chicago, Burlington & Quincy.....               | 4,153,498 75   | 61 28              | 295,403 11   | 1,541 37                | .....                         | 3,843 38              | .....                       | 5,381 75  | 3,374 09               | 2,010 66                   | 23                   |
| 15 | Galesburg & Rio.....                            | .....          | .....              | 1,485 25     | 1,541 37                | .....                         | 3,843 38              | .....                       | 5,381 75  | 3,374 09               | 2,010 66                   | 24                   |
| 16 | Illinois Valley & Northern.....                 | .....          | .....              | 8,389 46     | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 25                   |
| 17 | St. Louis, Rock Island & Chicago.....           | .....          | .....              | 50,55 14     | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 26                   |
| 18 | Chicago, Milwaukee & St. Paul.....              | 922,288 61     | 61 99              | 90,008 40    | 1,057 42                | .816                          | 3,241 57              | 1.496                       | 4,679 92  | 2,901 06               | 1,632 07                   | 27                   |
| 19 | Chicago, Peoria & St. Louis.....                | 493,600 42     | 65 89              | 16,737 61    | 612 48                  | .....                         | 1,411 86              | .....                       | 2,376 43  | 1,925 82               | 452 61                     | 28                   |
| 20 | Chicago, Rock Island & Pacific.....             | 1,288,900 08   | 66 95              | 148,505 77   | (21,996 02)             | .....                         | (25,631 77)           | .....                       | (28,205 56)   | (22,753 36)            | (5,452 20)                 | 29                   |
| 21 | Chicago, St. Louis & Pittsburgh.....            | 1,209,852 47   | 73 56              | 49,224 24    | 2,139 50                | .684                          | 7,221 38              | 1.416                       | 10,193 73   | 7,498 42               | 2,695 31                   | 30                   |
| 22 | Englewood Connecting (3).....                   | 1,819 93       | 68 02              | 1,813 33     | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 31                   |
| 23 | Chicago, St. Paul & Kansas City.....            | 953,990 72     | 73 31              | 22,681 31    | 1,084 41                | .604                          | 5,869 79              | 1.136                       | 7,555 39  | 5,541 30               | 2,014 09                   | 32                   |
| 24 | Cleveland, Cincinnati, Chicago & St. Louis..... | 2,626,380 79   | 63 74              | 135,471 88   | 2,138 84                | .990                          | 5,614 16              | 1.440                       | 8,627 01  | 5,498 87               | 3,128 14                   | 33                   |
| 25 | Kankakee & Seneca.....                          | 62,565 18      | 97 94              | 6,496 50     | 286 31                  | .205                          | 1,144 25              | .873                        | 1,518 11  | 1,486 83               | 31 28                      | 34                   |
| 26 | Peoria & Eastern.....                           | 177,965 18     | 69 22              | 3,155 72     | 732 54                  | .712                          | 1,372 58              | 1.334                       | 2,106 02  | 1,457 99               | 648 03                     | 35                   |
| 27 | East St. Louis & Carondelet (3).....            | 55,288 06      | 68 69              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 36                   |
| 28 | East St. Louis Connecting (3).....              | 140,603 17     | 93 98              | 2,100 54     | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 37                   |
| 29 | East St. Louis & Eastern.....                   | 272,293 31     | 61 79              | 17,521 86    | 98 86                   | .440                          | 2,910 60              | 1.867                       | 3,035 13  | 1,874 91               | 1,160 22                   | 38                   |
| 30 | East St. Louis & Eastern.....                   | 47,763 63      | 101 49             | 2,589 81     | 225 84                  | .360                          | 452 25                | .720                        | 771 46  | 783 69                 | 12 23                      | 39                   |
| 31 | Fulton County Narrow Gauge.....                 | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 40                   |
| 32 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 41                   |
| 33 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 42                   |
| 34 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 43                   |
| 35 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 44                   |
| 36 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 45                   |
| 37 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 46                   |
| 38 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 47                   |
| 39 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 48                   |
| 40 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 49                   |
| 41 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 50                   |
| 42 | .....   | .....          | .....              | .....        | .....                   | .....                         | .....                 | .....                       | .....   | .....                  | .....                      | 51                   |



|    |   |                 |        |                |            |       |            |         |            |            |            |    |
|----|---|-----------------|--------|----------------|------------|-------|------------|---------|------------|------------|------------|----|
| 53 | Grand Tower & Carbondale                    | 66,464.54       | 79.32  | 5,030.60       | 275.33     | .515  | 2,199.82   | 2,655   | 2,546.74   | 2,020.19   | 526.55     | 53 |
| 54 | Grand Tower & Cape Girardeau                | 13,575.55       | 96.84  |                | 68.98      | .189  | 401.04     | 1,020   | 486.75     | 471.36     | 15.39      | 54 |
| 55 | Illinois Central                            | 5,439.52        | 59.06  | 555,834.39     | 1,456.37   | .693  | 7,743.56   | 1,267   | 7,159.21   | 4,228.41   | 2,930.80   | 55 |
| 56 | Indiana & Illinois Southern                 | 3,761.81        | 73.00  | 5,844.41       | 1,965.34   | .315  | 648.81     | 1,460   | 930.25     | 679.68     | 250.47     | 56 |
| 57 | Indianapolis, Decatur & Western             | 160,534.57      | 73.71  | 13,829.94      | 837.79     | .487  | 1,776.94   | 1,610   | 2,800.12   | 2,109.31   | 770.81     | 57 |
| 58 | Indiana, Illinois & Iowa                    | 148,632.67      | 76.40  | 8,592.30       | 172.18     | .561  | 2,636.95   | 1,470   | 2,806.34   | 1,145.40   | 600.94     | 58 |
| 59 | Iowa Central Western                        | 285,205.47      | 85.90  | 12,067.10      | 1,200.49   | .450  | 3,043.95   | 1,348   | 3,557.82   | 3,056.24   | 1,761.81   | 59 |
| 60 | Lake Erie & Michigan Southern               | 296,265.45      | 85.15  | 18,062.88      | 1,303.39   | .748  | 2,802.50   | 1,480   | 4,210.21   | 2,448.40   | 1,761.81   | 60 |
| 61 | Lake Shore & Michigan Southern              | 333,946.81      | 88.12  | 8,626.63       | 1,931.45   | .132  | 16,241.95  | 3,230   | 27,149.14  | 33,819.31  | 3,329.83   | 61 |
| 62 | Louisville & Nashville                      | 675,619.65      | 66.25  | 37,282.93      | 1,931.45   | .132  | 3,082.44   | 1,314   | 5,651.63   | 3,745.15   | 1,906.48   | 62 |
| 63 | Louisville, Evansville & St. Louis, Consol. | 117,431.69      | 61.78  | 17,653.90      | 1,476.82   | .855  | 3,273.66   | 1,619   | 2,035.15   | 1,257.30   | 1,771.85   | 63 |
| 64 | Louisville, New Albany & Chicago            | 60,477.52       | 63.79  | 18,617.53      | 3,361.66   | .147  | 6,831.17   | 1,544   | 10,370.28  | 3,068.61   | 1,741.95   | 64 |
| 65 | Michigan Central                            | 317,458.16      | 65.38  | 28,755.58      | 759.54     | .436  | 3,627.56   | 1,202   | 4,327.37   | 3,352.44   | 3,279.22   | 65 |
| 66 | Mobile & Ohio                               | 588,400.69      | 73.90  | 18,756.70      | 795.75     | .887  | 9,793.41   | 1,262   | 10,535.50  | 8,069.98   | 1,174.93   | 66 |
| 67 | New York, Chicago & St. Louis               | 151,947.41      | 76.70  | 86,134.08      | 2,192.42   | .129  | 3,234.31   | 1,357   | 5,477.23   | 3,583.46   | 2,525.52   | 67 |
| 68 | Ohio & Mississippi                          | 1,345,562.95    | 65.33  | 14,453.28      | 1,134.78   | .859  | 1,314.78   | 1,375   | 2,363.62   | 1,826.18   | 1,863.77   | 68 |
| 69 | Ohio, Indiana & Western                     | 223,624.67      | 80.67  |                | 143.06     |       | 342.72     |         | 495.45     | 391.06     | 101.43     | 69 |
| 70 | Pawnee                                      | 2,604.89        | 82.20  |                | 5,889.22   | .160  | 17,614.54  | 1,893   | 24,794.31  | 15,590.34  | 9,203.97   | 70 |
| 71 | Pennsylvania Co. (Op. Pitts. Ft. W. & Chi.) | 224,628.86      | 62.52  | 4,667.25       | 1,537.36   | .567  | 1,139.24   | .849    | 2,750.55   | 2,185.62   | 490.98     | 71 |
| 72 | Pennsylvania Co. (Op. S. Chic. & Southern)  | 22,402.57       | 79.46  | 29,936.15      |            |       |            |         |            |            |            | 72 |
| 73 | Peoria & Pekin Union                        | 276,198.01      | 61.24  | 31,193.90      | 832.63     | .629  | 1,862.38   | 1,440   | 3,104.60   | 1,659.67   | 1,445.62   | 73 |
| 74 | Peoria, Decatur & Evansville                | 353,798.30      | 53.41  | 1,206.57       | 1,137.32   | .1016 | 4,660.17   | 2,234   | 5,805.51   | 2,741.46   | 3,064.08   | 74 |
| 75 | Quincy, Omaha & Kansas City                 | 6,821.71        | 69.76  | 23,206.57      | 1,737.32   |       | 7,298.81   | 1,530   | 1,659.71   | 1,161.82   | 2,917.89   | 75 |
| 76 | Rock Island & Peoria                        | 300,784.82      | 47.22  | 28,553.21      | 1,420.69   | .820  | 3,876.58   | 1,850   | 5,050.63   | 2,715.51   | 2,335.12   | 76 |
| 77 | St. Louis, Alton & Springfield              | 197,527.05      | 49.06  | 36,921.63      | 1,070.14   |       | 622.88     | 1,184   | 1,188.82   | 965.97     | 222.89     | 77 |
| 78 | St. Louis, Alton & Terre Haute              | 649,116.09      | 53.77  | 3,729.69       | 389.01     | .327  | 623.21     | 1,290   | 643.51     | 807.81     |            | 78 |
| 79 | St. Louis & Chicago                         | 50,954.37       | 81.10  | 8,000.00       |            |       |            |         |            |            |            | 79 |
| 80 | St. Louis & Peoria                          | 72,550.20       | 144.00 | 36,457.54      | 4,199.71   | 1.000 | 7,350.99   | 1,330   | 11,579.22  | 7,417.92   | 4,161.40   | 80 |
| 81 | Terminal Railroad Association of St. Louis  | 342,948.63      | 42.00  | (1)            | 32,311.70  |       | 1,880.60   |         | 1,383.38   | 1,401.29   | 1,582.09   | 81 |
| 82 | Terre Haute & Indianapolis                  | 1,174,540.38    | 44.06  | 14,890.61      | 463.14     | .360  | 3,850.60   | 1,320   | 3,853.38   | 3,062.40   | 1,582.09   | 82 |
| 83 | Terre Haute & Peoria                        | 246,725.17      | 72.36  | 31,853.43      | 963.42     | .761  | 2,359.90   | 1,285   | 3,062.40   | 2,645.35   | 1,167.35   | 83 |
| 84 | Tolledo, Peoria & Western                   | 653,331.91      | 72.22  | 31,787.79      | 249.69     | .404  | 2,075.14   | 1,054   | 2,447.01   | 1,338.37   | 848.64     | 84 |
| 85 | Tolledo, St. Louis & Kansas City            | 286,199.33      | 65.00  | 171,202.60     | 1,654.01   | .880  | 4,819.39   | 1,270   | 6,946.30   | 5,652.11   | 1,314.19   | 85 |
| 86 | Wabash                                      | 3,224,497.66    | 72.44  | 13,941.01      | 2,649.32   | .154  | 6,766.18   | 2,146   | 10,265.63  | 3,455.16   | 6,750.47   | 86 |
| 87 | Wabash, Chester & Western                   | 46,677.60       | 76.11  |                |            |       |            |         |            |            |            | 87 |
| 88 | Wisconsin Central lines                     | 208,268.01      | 33.86  |                |            |       |            |         |            |            |            | 88 |
| 89 | Totals                                      | \$40,653,891.36 | 63.69  | \$3,020,496.96 | \$1,367.31 | .765  | \$4,196.85 | \$1.418 | \$6,062.78 | \$3,825.37 | \$2,237.41 | 89 |

(1) Paid by lessor company. (2) Estimated by office. (3) Switching road. (4) Transfer company.





|   |            |             |       |         |       |       |            |               |        |         |       |       |
|---|------------|-------------|-------|---------|-------|-------|------------|---------------|--------|---------|-------|-------|
| 71 Lake Erie & Western.....                                   | 206,299    | 5,413,322   | 26.24 | .651    | 2,480 | 2,286 | 302,210    | 52,180,072    | 172.60 | 1,122   | .650  | 330   |
| 72 Lake Shore & Michigan Southern....                         | 998,137    | 7,036,992   | 7.50  | .130    | 1,741 | 1,338 | 2,717,318  | 28,336,308    | 10.40  | .075    | .726  | 841   |
| 73 Louisville & Nashville.....                                | 287,335    | 11,860,135  | 41.26 | 1.029   | 2,530 | 1,450 | 822,219    | 66,764,182    | 81.29  | .700    | .865  | 1,000 |
| 74 Louisville, Evansville & St. Louis,<br>(Consolidated)..... | 83,849     | 2,063,549   | 24.46 | .618    | 2,619 | 2,114 | 146,541    | 9,784,716     | 66.77  | .882    | 1,246 | 762   |
| 77 Louisville, New Albany & Chicago....                       | 23,407     | 968,954     | 19.86 | .338    | 2,266 | 2,141 | 46,316     | 6,928,618     | 19.86  | 1,372   | .517  | 578   |
| 78 Michigan Central.....                                      | 318,830    | 7,132,318   | 26.44 | .418    | 2,046 | 1,913 | 1,863,354  | 40,822,665    | 22.00  | .180    | .821  | 518   |
| 80 Mobile & Ohio.....   | 136,822    | 5,069,016   | 32.30 | .777    | 2,400 | 3,060 | 634,445    | 64,623,657    | 102.00 | .892    | .876  | 391   |
| 83 New York, Chicago & St. Louis....                          | 19,287     | 764,648     | 33.64 | .707    | 1,783 | 1,637 | 111,045    | 35,214,963    | 317.00 | 1,663   | .524  | 386   |
| 85 Ohio & Mississippi.....                                    | 578,569    | 28,697,863  | 50.29 | 1.170   | 3,327 | 2,004 | 1,197,369  | 111,054,711   | 92.75  | 1,030   | 1,110 | .086  |
| 86 Ohio, Indiana & Western.....                               | 117,846    | 4,949,564   | 42.00 | .834    | 2,003 | 2,029 | 165,117    | 23,573,146    | 142.00 | .370    | .682  | 515   |
| 87 Pawnee.....  | 3,350      | .....       | ..... | .....   | ..... | ..... | 1,265      | .....         | .....  | .....   | ..... | 87    |
| 88 Penn. Co. (Op. P., Fr. W. & C.).....                       | 143,578    | 3,989,894   | 27.78 | .607    | 2,184 | 1,541 | 250,927    | 38,196,013    | 152.00 | 1,039   | .653  | 439   |
| 88 Penn. Co. (Op. So. Chi. & Southern).<br>.....              | 222,530    | 943,908     | 4.24  | .070    | 1,669 | 1,457 | 35,229     | 414,376       | 4.35   | 1,122   | 2,818 | 2,086 |
| 92 Peoria & Pekin Union.....                                  | .....      | .....       | ..... | .....   | ..... | ..... | 157,610    | .....         | .....  | .....   | ..... | 92    |
| 93 Peoria, Decatur & Evansville.....                          | 231,220    | 5,604,418   | 21.23 | .636    | 2,025 | 2,248 | 399,707    | 33,876,417    | 109.38 | 1,282   | 1,173 | .075  |
| 94 Quincy, Omaha & Kansas City.....                           | .....      | .....       | ..... | .....   | ..... | ..... | 26,714     | .....         | .....  | .....   | ..... | 94    |
| 95 Rock Island & Peoria.....                                  | 180,022    | 4,340,872   | 21.11 | .619    | 2,570 | 2,049 | 584,750    | 33,377,530    | 57.08  | .900    | 1,577 | .061  |
| 96 St. Louis, Alton & Springfield.....                        | .....      | .....       | ..... | .....   | ..... | ..... | 81,743     | .....         | .....  | .....   | ..... | 96    |
| 98 St. Louis, Alton & Terre Haute.....                        | 321,523    | 8,808,128   | 27.00 | .657    | 2,349 | 2,429 | 1,485,948  | 82,437,493    | 55.50  | .623    | 1,124 | .527  |
| 105 St. Louis, Alton & Terre Haute.....                       | 40,322     | 890,074     | 22.06 | .507    | 2,298 | ..... | 66,605     | 1,899,884     | 28.52  | .510    | 1,895 | 105   |
| 106 St. Louis & Peoria.....                                   | .....      | .....       | ..... | .....   | ..... | ..... | 33,028     | 462,392       | 14.00  | .254    | 1,887 | 2,735 |
| 107 Terminal Railroad Asso. of St. Louis (S)<br>.....         | 1,342,355  | .....       | ..... | .134    | ..... | ..... | .....      | .....         | .....  | .150    | ..... | 107   |
| 108 Terre Haute & Indianapolis.....                           | 364,282    | 18,838,798  | 52.00 | 1.210   | 2,343 | 2,091 | 1,577,652  | 138,453,010   | 87.76  | .740    | .840  | .564  |
| 110 Terre Haute & Peoria.....                                 | 124,900    | 3,122,500   | 25.00 | .640    | 2,500 | 2,800 | 261,692    | 40,195,316    | 68.43  | .930    | .530  | 390   |
| 111 Toledo, Peoria & Western.....                             | 432,611    | 9,660,059   | 22.33 | .550    | 2,464 | 2,108 | 587,350    | 70,719,184    | 223.07 | .992    | 1,451 | 1,119 |
| 112 Toledo, St. Louis & Kansas City.....                      | 122,630    | 2,245,776   | 18.31 | .429    | 2,344 | 2,637 | 317,150    | 476,732,444   | 299.30 | 1,171   | .525  | .321  |
| 114 Wabash, St. Louis & Kansas City.....                      | 1,038,534  | 49,727,669  | 47.90 | 1.019   | 2,130 | 1,890 | 2,277,453  | 1,509,450     | 21.96  | 1,555   | .647  | .479  |
| 115 Wabash, Chester & Western.....                            | 39,518     | 692,557     | 15.24 | .435    | 2,851 | 4,087 | 72,834     | 42,973,653    | 55.11  | .552    | 2,514 | 1,378 |
| 116 Wisconsin Central Lines.....                              | 206,550    | 8,623,139   | 41.74 | .770    | 1,823 | 1,292 | 779,661    | .....         | .....  | .930    | .329  | 116   |
| Totals.....   | 24,910,820 | 554,960,062 | 25.12 | \$0.529 | 2,066 | 1,900 | 48,364,653 | 4,271,377,794 | 102.45 | \$0.853 | .832  | .517  |

(1) Estimated by office on mileage basis. (2) Estimated by company. (3) Estimated by office. (4) Includes 133,635 tons of freight transferred in cars, and not included in detail tonnage. (5) Transfer Co.

TABLE IX.—Classified Freight Traffic in Illinois in Tons, for year ending June 30, 1890.

| NAME OF COMPANY. |                                  | PRODUCTS OF AGRICULTURE. |            |                       |          |              |             |                        |               |                   |                                   | PRODUCTS OF ANIMALS.        |           |                       |   |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|                  |                                  | Grain.....               | Flour..... | Other mill products.. | Hay..... | Tobacco .... | Cotton..... | Fruit and vegetables.. | Live stock... | Dressed meats.... | Other pack- ing house products... | Poultry, game and fish..... | Wool..... | Hides and leather.... |   |  |   |   |   |   |   |   |   |   |   |    |    |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                  |                                  |                          |            |                       |          |              |             |                        |               |                   |                                   |                             |           |                       |   |  |   |   |   |   |   |   |   |   |   |    |    |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1                | Atchison, Topeka & Santa Fe..... | 538,422                  | 8,516      |                       | 3,994    | 740          |             | 5,456                  | 274,139       | 13,606            |                                   |                             | 10,519    |                       | 1 |  |   |   |   |   |   |   |   |   |   |    |    |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |









|  |         |         |        |         |         |         |         |         |         |         |         |         |
|--|---------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 85 Ohio & Mississippi.....                         | 15,730  | .....   | 15,452 | 4,541   | 1,860   | 9,144   | 21,062  | 401     | 39,987  | 20,117  | 2,023   | 85      |
| 86 Ohio, Indiana & Western.....                    | 2,527   | 793     | 2,958  | 991     | 2,064   | 1,365   | 1,949   | 2,611   | 413     | 827     | 386     | 86      |
| 87 Pawnee.....                                     | .....   | .....   | .....  | .....   | .....   | .....   | 33      | 2       | .....   | .....   | 14      | 87      |
| 88 Pennsylvania Co. (Op. P., Ft. W. & Chi.).....   | 4,784   | 1,560   | 13,667 | 2,730   | 5,068   | 10,328  | 6,403   | 557     | 351     | 986     | 983     | 88      |
| 88 Pennsylvania Co. (Op. So. Chi. & Southern)..... | 789     | 1       | 3,627  | 2,305   | 5,891   | 8,794   | 26,642  | 30      | .....   | 436     | 330     | 88      |
| 92 Peoria & Pekin Union.....                       | 209     | .....   | (2)    | 136     | .....   | .....   | .....   | 82      | 16      | 3       | 32      | 92      |
| 93 Peoria, Decatur & Evansville.....               | 497     | 75      | 3,162  | 318     | 1,043   | .....   | 946     | 623     | 552     | 26,334  | 911     | 93      |
| 94 Quincy, Omaha & Kansas City.....                | .....   | 50      | 417    | 148     | 1,001   | 1,805   | 6,671   | 5,942   | 430     | 1,232   | 4,816   | 94      |
| 95 Rock Island & Peoria.....                       | 6,312   | 369     | 2,848  | .....   | .....   | .....   | .....   | 393     | 2,121   | 1,485   | 733     | 95      |
| 96 St. Louis, Alton & Springfield.....             | .....   | .....   | 21,206 | 2,000   | 5,050   | 471     | 10,040  | 6,550   | 11,400  | 21,583  | 9,700   | 96      |
| 98 St. Louis, Alton & Terre Haute.....             | 441     | 3,396   | 2,760  | 857     | 10,447  | .....   | 1,580   | 63      | 61      | 305     | 496     | 98      |
| 105 St. Louis & Chicago.....                       | .....   | .....   | .....  | 405     | .....   | .....   | .....   | .....   | .....   | .....   | .....   | 105     |
| 106 St. Louis & Peoria.....                        | .....   | .....   | 38,887 | 27,439  | 22,696  | 25,324  | 39,334  | 8,968   | 12,116  | 12,608  | 3,247   | 106     |
| 108 Terre Haute & Indianapolis.....                | 11,392  | 7,104   | 3,246  | 5,474   | .....   | .....   | 2,038   | 1,023   | 829     | .....   | 1,301   | 108     |
| 110 Terre Haute & Peoria.....                      | 735     | .....   | 781    | 2,087   | 4,942   | 3,290   | 9,363   | 6,658   | 1,718   | 16,342  | 4,943   | 110     |
| 111 Toledo, Peoria & Western.....                  | 13,946  | 8,690   | 2,647  | 5,722   | 20,405  | .....   | 8,234   | 613     | 370     | .....   | 5,824   | 111     |
| 112 Toledo, St. Louis & Kansas City.....           | 1,536   | 678     | 17,520 | 11,008  | 6,263   | 7,473   | 30,535  | 5,007   | 3,014   | 10,143  | 6,044   | 112     |
| 114 Wabash.....                                    | 18,798  | 11,412  | 1,210  | .....   | 1,994   | .....   | 6,522   | 67      | 118     | 345     | 103     | 114     |
| 115 Wabash, Chester & Western.....                 | .....   | .....   | 11,756 | 55,224  | 10,797  | 21,250  | 6,852   | 2,263   | 2,312   | 1,654   | 3,304   | 115     |
| 116 Wisconsin Central Lines.....                   | 14,783  | .....   | .....  | .....   | .....   | .....   | .....   | .....   | .....   | .....   | .....   | 116     |
| Totals.....  | 722,110 | 214,930 | 28,973 | 497,748 | 598,866 | 448,834 | 823,544 | 232,092 | 527,637 | 318,123 | 150,277 | 114,637 |

(1) Includes iron and steel rails.

(2) Iron scrap.

(3) Includes all manufactures.



|             |   |         |           |         |         |           |         |           |           |         |           |            |     |
|-------------|---|---------|-----------|---------|---------|-----------|---------|-----------|-----------|---------|-----------|------------|-----|
| 77          | Louisville, New Albany & Chicago.....           | 302     | 6,266     | 173     | 113     | 10,331    | 657     | 7,814     | 3,019     | 1,791   | 3,154     | 46,316     | 77  |
| 78          | Michigan Central.....                           | 65,702  | 15,488    | 2,846   | 3,992   | 41,371    | 94,104  | 107,837   | .....     | 74,514  | 297,963   | 1,823,351  | 78  |
| 80          | Mobile & Ohio.....                              | .....   | .....     | .....   | .....   | .....     | .....   | 81,881    | 251,085   | .....   | 1,886     | 1,631,443  | 80  |
| 83          | New York, Chicago & St. Louis.....              | 10,626  | 182,720   | 907     | 535     | 5,412     | 598     | 40,527    | 15,523    | 221     | 10,163    | 111,045    | 83  |
| 85          | Ohio & Mississippi.....                         | 2,635   | 436,548   | 15,323  | 8,221   | 2,146     | 2,336   | 40,527    | 15,523    | .....   | 21,810    | 1,197,360  | 85  |
| 86          | Ohio, Indiana & Western.....                    | 6,336   | 27,714    | 1,486   | 32      | 2,758     | 393     | 14,944    | 8,465     | 132     | 8,169     | 166,117    | 86  |
| 87          | Pawnee.....                                     | .....   | 139       | .....   | .....   | .....     | 30      | 13,146    | 46        | 56      | .....     | 1,265      | 87  |
| 88          | Pennsylvania Co. (Op. Pitts., Ft. Wayne & Chi.) | 2,780   | 36,863    | 30,963  | 31,311  | 22,710    | .....   | 13,146    | 2,574     | .....   | 32,465    | 250,327    | 88  |
| 88          | Pennsylvania Co. (Op. South Chi. & Southern)    | .....   | 2,430     | 256     | 2,115   | .....     | .....   | 13,146    | 1,230     | .....   | 27,268    | 95,229     | 88  |
| 92          | Peoria & Pekin Union.....                       | 41      | 151,162   | 25      | .....   | 872       | 155     | 109       | 1,131     | 1,130   | 1,104     | 157,610    | 92  |
| 93          | Peoria, Decatur & Evansville.....               | 2,307   | 49,763    | 128     | .....   | 412       | .....   | 36,369    | 6,137     | .....   | 21,618    | 369,707    | 93  |
| 94          | Quincy, Omaha & Kansas City.....                | 550     | .....     | .....   | .....   | .....     | 316     | 2,914     | 10,704    | 11,881  | 3,262     | 26,714     | 94  |
| 95          | Rock Island & Peoria.....                       | 10,429  | 186,635   | 3,576   | .....   | 1,959     | 1,160   | 21,257    | 14,031    | .....   | 33,583    | 584,750    | 95  |
| 96          | St. Louis, Alton & Springfield.....             | .....   | 16,760    | .....   | .....   | 12,083    | 3,825   | 6,650     | 8,438     | .....   | .....     | 81,743     | 96  |
| 98          | St. Louis, Alton & Terre Haute.....             | .....   | 828,401   | 6,650   | .....   | 11,150    | 4,310   | 138,672   | 80,279    | .....   | 45,975    | 1,485,918  | 98  |
| 105         | St. Louis & Chicago.....                        | 36      | 18,649    | .....   | .....   | 92        | .....   | 7,064     | 1,571     | .....   | 2,576     | 66,046     | 105 |
| 106         | St. Louis & Peoria.....                         | .....   | 32,163    | 71      | .....   | .....     | .....   | 139       | 127       | .....   | .....     | 33,028     | 106 |
| 108         | Terre Haute & Indianapolis.....                 | 3,211   | 535,087   | 100,030 | 63,147  | 14,198    | .....   | 51,200    | 63,785    | .....   | 202,277   | 1,377,652  | 108 |
| 110         | Terre Haute & Peoria.....                       | 1,898   | 27,499    | 89      | .....   | 4,223     | 962     | 21,040    | 9,101     | 674     | 18,652    | 261,692    | 110 |
| 111         | Toledo, Peoria & Western.....                   | 12,353  | 123,816   | 1,585   | 6       | 10,093    | 3,088   | 27,324    | 19,249    | .....   | 12,790    | 587,350    | 111 |
| 112         | Toledo, St. Louis & Kansas City.....            | 9,518   | 26,937    | 420     | .....   | 6,631     | 8,259   | 61,656    | 26,535    | .....   | 8,244     | 317,150    | 112 |
| 114         | Wabash.....                                     | 63,889  | 534,744   | 11,441  | 1,632   | 39,690    | .....   | 189,506   | 140,023   | .....   | 251,400   | 277,453    | 114 |
| 115         | Wabash, Chester & Western.....                  | 81      | 34,884    | 562     | .....   | 685       | 203     | 2,772     | 2,156     | 1,100   | 377       | 72,834     | 115 |
| 116         | Wisconsin Central Lines.....                    | 514     | 21,956    | 1,145   | 134,578 | 21,146    | 425     | 109,615   | 87,878    | 138,266 | 17,051    | 779,661    | 116 |
| Totals..... |   | 865,742 | 9,837,082 | 998,240 | 854,310 | 2,017,780 | 311,812 | 3,176,001 | 3,189,436 | 612,737 | 8,132,186 | 50,796,636 |     |

(1) Estimated by company.

(2) Estimated by office.

(3) Includes all products of mines.

TABLE X.—Number of Employés and Salaries, for year ending June 30, 1890—Whole Line and in Illinois.

| NAME OF COMPANY.                                 |                       |                       |                      |                     |                 |               |                  |                     |                  |                  |                    |                     |                     |
|--|-----------------------|-----------------------|----------------------|---------------------|-----------------|---------------|------------------|---------------------|------------------|------------------|--------------------|---------------------|---------------------|
|  | 1                     | 2                     | 3                    | 4                   | 5               | 6             | 7                | 8                   | 9                | 10               | 11                 | 12                  | 13                  |
|  | General officers .... | General office clerks | Station agents ..... | Other station men.. | Enginemén ..... | Firemen ..... | Conductors ..... | Other trainmen..... | Machinists ..... | Carpenters ..... | Other shopmen..... | Se tion foremen.... | Other trackmen..... |
| 1 Atchison, Topeka & Santa Fe .....              | 16                    | 146                   | 106                  | 284                 | 136             | 142           | 121              | 275                 | 75               | 33               | 430                | 125                 | 1,092               |
| 5 Baltimore & Ohio .....                         | 5                     | 36                    | 34                   | 263                 | 80              | 72            | 60               | 130                 | 67               | 152              | 37                 | 58                  | 255                 |
| 7 Belt Railway of Chicago.....                   | 9                     | 19                    | 1                    | 32                  | 37              | 35            | 27               | 71                  | 16               | 16               | 16                 | 6                   | 48                  |
| 8 Centralia & Chester .....                      | 23                    | 1                     | 1                    | 1                   | 1               | 1             | 1                | 1                   | 1                | 1                | 1                  | 1                   | 1                   |
| 9 Chicago & Alton .....                          | 9                     | 78                    | 130                  | 330                 | 157             | 158           | 161              | 363                 | 201              | 226              | 404                | 166                 | 976                 |
| 12 Chicago & Atlantic .....                      | 11                    | 43                    | 64                   | 338                 | 92              | 92            | 50               | 151                 | 36               | 62               | 135                | 59                  | 156                 |
| 14 C. teago & Eastern Illinois .....             | 9                     | 61                    | 87                   | 120                 | 82              | 82            | 54               | 115                 | 61               | 61               | 255                | 78                  | 320                 |
| 15 Chicago & Eastern Indiana .....               | 9                     | 11                    | 8                    | 67                  | 4               | 4             | 119              | 183                 | 212              | 168              | 122                | 70                  | 326                 |
| 17 Chicago & Grand Trunk .....                   | 15                    | 125                   | 68                   | 349                 | 118             | 136           | 119              | 183                 | 212              | 168              | 122                | 70                  | 326                 |
| 20 Chicago & Iowa .....                          | 4                     | 11                    | 20                   | 18                  | 14              | 16            | 10               | 23                  | 16               | 7                | 20                 | 17                  | 60                  |
| 21 Chicago & Northwestern .....                  | 29                    | 421                   | 667                  | 2,121               | 1,016           | 1,100         | 657              | 1,365               | 527              | 1,103            | 2,253              | 729                 | 3,464               |
| 23 Chicago & Ohio River .....                    | 5                     | 19                    | 19                   | 1                   | 2               | 1             | 49               | 94                  | 79               | 37               | 118                | 12                  | 297                 |
| 24 Chicago, Burlington & Northern .....          | 17                    | 81                    | 130                  | 49                  | 58              | 58            | 2                | 2                   | 2                | 2                | 2                  | 13                  | 21                  |
| 25 Chicago, Burlington & Quincy .....            | 115                   | 914                   | 693                  | 1,501               | 884             | 887           | 579              | 1,244               | 859              | 1,351            | 4,421              | 866                 | 4,251               |
| 29 Chicago, Milwaukee & St. Paul .....           | 50                    | 368                   | 856                  | 992                 | 853             | 861           | 651              | 1,353               | 421              | 829              | 2,428              | 1,256               | 3,428               |
| 30 Chicago, Peoria & St. Louis .....             | 11                    | 23                    | 53                   | 25                  | 24              | 24            | 19               | 31                  | 25               | 52               | 50                 | 51                  | 211                 |
| 34 Chicago, Rock Island & Pacific .....          | 12                    | 346                   | 433                  | 1,021               | 553             | 553           | 375              | 847                 | 769              | 686              | 1,571              | 554                 | 2,352               |
| 36 Chicago, St. Louis & Pittsburgh .....         | 38                    | 163                   | 113                  | 564                 | 233             | 232           | 159              | 381                 | 161              | 168              | 737                | 237                 | 609                 |
| 38 Chicago, St. Paul & Kansas City .....         | 15                    | 201                   | 143                  | 236                 | 115             | 114           | 102              | 193                 | 119              | 117              | 275                | 143                 | 558                 |
| 39 Cleveland, Cincinnati, Chi. & St. Louis ..... | 35                    | 471                   | 341                  | 1,070               | 328             | 338           | 324              | 694                 | 267              | 229              | 1,506              | 253                 | 1,391               |
| 42 Kankakee & Seneca .....                       | 1                     | 2                     | 6                    | 2                   | 2               | 2             | 2                | 2                   | 2                | 2                | 2                  | 2                   | 2                   |
| 43 Peoria and Eastern .....                      | 15                    | 44                    | 63                   | 50                  | 53              | 55            | 32               | 85                  | 37               | 37               | 312                | 56                  | 190                 |
| 45 East St. Louis & Carondelet .....             | 6                     | 3                     | 1                    | 1                   | 3               | 3             | 3                | 9                   | 2                | 2                | 2                  | 2                   | 10                  |
| 46 East St. Louis Connecting .....               | 3                     | 1                     | 1                    | 1                   | 1               | 1             | 1                | 1                   | 1                | 1                | 1                  | 1                   | 1                   |
| 48 Elgin, Joliet & Eastern .....                 | 11                    | 18                    | 24                   | 11                  | 12              | 12            | 13               | 4                   | 6                | 4                | 15                 | 3                   | 35                  |
| 51 Fulton County Narrow Gauge .....              | 3                     | 1                     | 1                    | 1                   | 1               | 1             | 1                | 1                   | 1                | 1                | 1                  | 1                   | 1                   |
| 53 Grand Tower & Carbondale .....                | 1                     | 1                     | 4                    | 1                   | 5               | 5             | 3                | 3                   | 3                | 2                | 2                  | 8                   | 115                 |
| 54 Grand Tower & Cape Girardeau .....            | 34                    | 206                   | 416                  | 1,012               | 488             | 537           | 381              | 835                 | 251              | 218              | 1,343              | 378                 | 2,136               |
| 55 Illinois Central .....                        | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |
| 56 Indiana & Illinois Southern .....             | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |
| 57 Indiana & Illinois Southern .....             | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |
| 58 Indiana & Illinois Southern .....             | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |
| 59 Indiana & Illinois Southern .....             | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |
| 60 Indiana & Illinois Southern .....             | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |
| 61 Indiana & Illinois Southern .....             | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |
| 62 Indiana & Illinois Southern .....             | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |
| 63 Indiana & Illinois Southern .....             | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |
| 64 Indiana & Illinois Southern .....             | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |
| 65 Indiana & Illinois Southern .....             | 3                     | 3                     | 14                   | 1                   | 3               | 3             | 3                | 5                   | 2                | 4                | 7                  | 4                   | 20                  |

|             |  |     |       |       |        |       |       |       |        |       |       |        |       |        |       |
|-------------|--|-----|-------|-------|--------|-------|-------|-------|--------|-------|-------|--------|-------|--------|-------|
| 66          | Indianapolis, Decatur & Western .....        | 6   | 10    | 39    | 25     | 15    | 16    | 10    | 26     | 15    | 26    | 55     | 25    | 92     | 66    |
| 67          | Indiana, Illinois & Iowa.....                | 8   | 17    | 16    | 10     | 10    | 10    | 5     | 9      | 5     | 8     | 157    | 20    | 55     | 67    |
| 68          | Iowa Central.....                            | 8   | 41    | 99    | 53     | 51    | 38    | 49    | 44     | 44    | 157   | 73     | 73    | 253    | 68    |
| 69          | Lake Erie & Western.....                     | 20  | 39    | 113   | 160    | 87    | 88    | 60    | 128    | 485   | 81    | 1,042  | 292   | 366    | 71    |
| 70          | Lake Shore & Michigan Southern.....          | 18  | 272   | 253   | 2,646  | 637   | 661   | 384   | 808    | 485   | 737   | 1,042  | 292   | 366    | 8,284 |
| 71          | Louisville & Nashville.....                  | 2   | 5     | 27    | 107    | 45    | 49    | 29    | 91     | 62    | 85    | 364    | 33    | 233    | 74    |
| 72          | Louisville, Evansville & St. L. Consol.....  | 11  | 53    | 54    | 129    | 89    | 58    | 30    | 72     | 42    | 56    | 105    | 52    | 237    | 76    |
| 73          | Louisville, New Albany & Chicago.....        | 18  | 71    | 121   | 129    | 92    | 94    | 54    | 128    | 52    | 90    | 237    | 94    | 433    | 77    |
| 74          | Louisville, New Albany & Chicago.....        | 18  | 71    | 121   | 129    | 92    | 94    | 54    | 128    | 52    | 90    | 237    | 94    | 433    | 77    |
| 75          | Michigan Central.....                        | 21  | 248   | 226   | 841    | 488   | 510   | 291   | 713    | 217   | 363   | 723    | 363   | 1,084  | 78    |
| 76          | Michigan Central.....                        | 21  | 248   | 226   | 841    | 488   | 510   | 291   | 713    | 217   | 363   | 723    | 363   | 1,084  | 78    |
| 77          | Mobile & Ohio.....                           | 2   | 24    | 23    | 36     | 36    | 40    | 17    | 44     | 23    | 17    | 71     | 34    | 138    | 80    |
| 78          | New York, Chicago & St. Louis.....           | 14  | 98    | 101   | 343    | 154   | 154   | 103   | 158    | 96    | 54    | 497    | 100   | 593    | 83    |
| 79          | Ohio & Mississippi.....                      | 16  | 104   | 121   | 253    | 125   | 125   | 129   | 241    | 136   | 293   | 314    | 112   | 824    | 85    |
| 80          | Ohio & Mississippi.....                      | 16  | 104   | 121   | 253    | 125   | 125   | 129   | 241    | 136   | 293   | 314    | 112   | 824    | 85    |
| 81          | Pawnee.....                                  | 36  | 126   | 131   | 997    | 336   | 368   | 309   | 797    | 227   | 549   | 1,766  | 138   | 1,460  | 88    |
| 82          | Pennsylvania Co. (Op. P. Ft. W. & C.).....   | 3   | 3     | 3     | 3      | 3     | 3     | 1     | 1      | 1     | 1     | 1      | 1     | 1      | 9     |
| 83          | Pennsylvania Co. (Op. P. Ft. W. & C.).....   | 3   | 3     | 3     | 3      | 3     | 3     | 1     | 1      | 1     | 1     | 1      | 1     | 1      | 9     |
| 84          | Peoria & Pekin Union.....                    | 4   | 5     | 3     | 37     | 26    | 31    | 1     | 2      | 11    | 27    | 29     | 6     | 65     | 92    |
| 85          | Peoria, Decatur & Evansville.....            | 12  | 41    | 49    | 54     | 27    | 35    | 14    | 38     | 30    | 33    | 54     | 41    | 100    | 93    |
| 86          | Quincy, Omaha & Kansas City.....             | 7   | 5     | 22    | 6      | 7     | 8     | 6     | 9      | 2     | 12    | 4      | 23    | 75     | 94    |
| 87          | Rock Island & Peoria.....                    | 5   | 7     | 25    | 14     | 13    | 13    | 8     | 14     | 12    | 21    | 30     | 19    | 90     | 95    |
| 88          | St. Louis, Alton & Springfield.....          | 5   | 4     | 18    | 14     | 4     | 4     | 4     | 8      | 1     | 7     | 95     | 10    | 60     | 96    |
| 89          | St. Louis, Alton & Terre Haute.....          | 9   | 37    | 44    | 25     | 33    | 31    | 25    | 59     | 45    | 56    | 95     | 42    | 250    | 98    |
| 90          | St. Louis, Alton & Terre Haute.....          | 9   | 37    | 44    | 25     | 33    | 31    | 25    | 59     | 45    | 56    | 95     | 42    | 250    | 98    |
| 91          | St. Louis & Chicago.....                     | 3   | 8     | 8     | 2      | 9     | 2     | 1     | 3      | 1     | 1     | 1      | 6     | 18     | 105   |
| 92          | St. Louis & Peoria.....                      | 3   | 8     | 8     | 2      | 9     | 2     | 1     | 3      | 1     | 1     | 1      | 6     | 18     | 105   |
| 93          | Terminal R. R. Association of St. Louis..... | 2   | 5     | 1     | 1      | 1     | 1     | 1     | 1      | 1     | 1     | 1      | 1     | 1      | 9     |
| 94          | Terre Haute & Indianapolis.....              | 14  | 60    | 24    | 30     | 60    | 60    | 15    | 15     | 40    | 31    | 40     | 22    | 63     | 107   |
| 95          | Terre Haute & Peoria.....                    | 14  | 60    | 24    | 30     | 60    | 60    | 15    | 15     | 40    | 31    | 40     | 22    | 63     | 107   |
| 96          | Terre Haute & Peoria.....                    | 14  | 60    | 24    | 30     | 60    | 60    | 15    | 15     | 40    | 31    | 40     | 22    | 63     | 107   |
| 97          | Toledo, Peoria & Western.....                | 7   | 28    | 45    | 41     | 30    | 30    | 12    | 12     | 24    | 34    | 95     | 33    | 219    | 108   |
| 98          | Toledo, Peoria & Western.....                | 7   | 28    | 45    | 41     | 30    | 30    | 12    | 12     | 24    | 34    | 95     | 33    | 219    | 108   |
| 99          | Toledo, St. Louis & Kansas City.....         | 5   | 28    | 45    | 41     | 30    | 30    | 12    | 12     | 24    | 34    | 95     | 33    | 219    | 108   |
| 100         | Toledo, St. Louis & Kansas City.....         | 5   | 28    | 45    | 41     | 30    | 30    | 12    | 12     | 24    | 34    | 95     | 33    | 219    | 108   |
| 101         | Toledo, St. Louis & Kansas City.....         | 5   | 28    | 45    | 41     | 30    | 30    | 12    | 12     | 24    | 34    | 95     | 33    | 219    | 108   |
| 102         | Toledo, St. Louis & Kansas City.....         | 5   | 28    | 45    | 41     | 30    | 30    | 12    | 12     | 24    | 34    | 95     | 33    | 219    | 108   |
| 103         | Wabash.....                                  | 34  | 267   | 340   | 846    | 688   | 497   | 279   | 638    | 519   | 331   | 216    | 311   | 1,360  | 112   |
| 104         | Wabash.....                                  | 34  | 267   | 340   | 846    | 688   | 497   | 279   | 638    | 519   | 331   | 216    | 311   | 1,360  | 112   |
| 105         | Wabash, Chester & Western.....               | 2   | 1     | 9     | 3      | 2     | 2     | 2     | 4      | 1     | 7     | 9      | 6     | 30     | 115   |
| 106         | Wisconsin Central Lines.....                 | 21  | 114   | 123   | 319    | 163   | 138   | 90    | 180    | 53    | 146   | 319    | 134   | 749    | 116   |
| Totals..... |  | 888 | 5,526 | 6,631 | 17,768 | 8,538 | 8,829 | 6,011 | 13,035 | 6,474 | 8,747 | 24,155 | 7,480 | 35,784 |       |

(1) Does not include contractor's employees, to whom monthly allowance is made, to cover cost of maintenance.



Table X—Continued.

|    | NAME OF COMPANY.                                | 14    | 15    | 16    | 17    | WHOLE LINE.     |                           | 19    | IN ILLINOIS.    |                           |    |
|----|---|-------|-------|-------|-------|-----------------|---------------------------|-------|-----------------|---------------------------|----|
|    |   |       |       |       |       |                 |                           |       |                 |                           |    |
|    |   |       |       |       |       | Grand total.... | Total yearly compensation |       | Grand total.... | Total yearly compensation |    |
| 1  | Atchison, Topeka & Santa Fe.....                | 181   | 94    | ..... | 210   | 3,466           | \$2,672,856 60            | 1,707 | 1,707           | \$1,590,076 81            | 1  |
| 5  | Baltimore & Ohio.....                           | 166   | 71    | ..... | 441   | 1,917           | 1,178,304 90              | 1,101 | 1,101           | 62,214 50                 | 5  |
| 7  | Belt Railway of Chicago.....                    | 12    | 14    | ..... | 67    | 432             | 283,228 41                | 432   | 432             | 283,228 41                | 7  |
| 8  | Centralia & Chester.....                        | ..... | ..... | ..... | ..... | 15              | 5,393 76                  | 16    | 16              | 5,393 76                  | 8  |
| 9  | Chicago & Alton.....                            | 288   | 97    | ..... | 213   | 4,263           | 2,809,571 04              | 3,367 | 3,367           | 2,236,127 88              | 9  |
| 12 | Chicago & Atlantic.....                         | ..... | ..... | ..... | 81    | 1,706           | 1,027,100 00              | 1,119 | 1,119           | 71,897 00                 | 12 |
| 13 | Chicago & Eastern Illinois.....                 | 91    | 54    | ..... | 100   | 1,670           | 981,434 91                | 1,170 | 1,170           | 677,476 67                | 13 |
| 14 | Chicago & Western Indiana.....                  | 126   | 29    | ..... | 8     | 370             | 234,235 66                | 370   | 370             | 234,235 66                | 14 |
| 15 | Chicago & Grand Trunk.....                      | 153   | 106   | ..... | 256   | 2,564           | 1,554,044 32              | 231   | 231             | 142,089 48                | 15 |
| 17 | Chicago & Iowa.....                             | 6     | 17    | ..... | 6     | 265             | 155,907 88                | 265   | 265             | 155,907 88                | 17 |
| 20 | Chicago & North-western.....                    | 1,094 | 449   | 3     | 1,303 | 18,333          | 11,293,930 41             | 6,836 | 6,836           | 4,334,229 18              | 20 |
| 21 | Chicago & Ohio River.....                       | ..... | ..... | ..... | 72    | 72              | 35,764 72                 | 72    | 72              | 35,764 72                 | 21 |
| 23 | Chicago, Burlington & Northern.....             | 48    | 65    | ..... | 89    | 1,285           | 773,525 28                | 296   | 296             | 121,753 32                | 23 |
| 24 | Chicago, Burlington & Quincy.....               | 1,114 | 574   | ..... | 805   | 21,061          | 11,593,871 78             | 9,630 | 9,630           | 5,212,741 31              | 24 |
| 25 | Chicago, Milwaukee & St. Paul.....              | 1,074 | 782   | ..... | 3,412 | 19,467          | 11,953,165 26             | 1,095 | 1,095           | 671,707 88                | 25 |
| 29 | Chicago, Peoria & St. Louis.....                | 7     | 11    | ..... | 23    | 640             | 350,733 10                | 640   | 640             | 350,733 10                | 29 |
| 30 | Chicago, Rock Island & Pacific.....             | 567   | 297   | ..... | 376   | 11,892          | 7,071,133 72              | 3,317 | 3,317           | 2,115,235 56              | 30 |
| 31 | Chicago, St. Louis & Pittsburgh.....            | 199   | 158   | ..... | 243   | 4,523           | 2,639,895 41              | 199   | 199             | 117,475 40                | 31 |
| 32 | Englewood Connecting.....                       | 2     | ..... | ..... | 2     | 4               | 1,520 40                  | 4     | 4               | 1,520 40                  | 32 |
| 33 | Chicago, St. Paul & Kansas City.....            | 75    | 93    | ..... | 83    | 2,612           | 1,764,240 00              | 616   | 616             | 34,320 50                 | 33 |
| 38 | Cleveland, Cincinnati, Chicago & St. Louis..... | 579   | 296   | ..... | 416   | 8,501           | 4,491,340 11              | 3,131 | 3,131           | 1,454,160 56              | 38 |
| 42 | Kankakee & Seneca.....                          | ..... | 1     | ..... | ..... | 47              | 23,455 70                 | 47    | 47              | 23,455 70                 | 42 |
| 43 | Peoria & Eastern.....                           | 13    | 36    | ..... | 128   | 1,296           | 700,577 74                | 426   | 426             | 290,709 16                | 43 |
| 45 | East St. Louis & Carondelet.....                | 9     | 9     | ..... | 5     | 58              | 35,161 00                 | 55    | 55              | 35,161 00                 | 45 |
| 46 | East St. Louis Connecting.....                  | 48    | 1     | ..... | 10    | 165             | 112,176 78                | 165   | 165             | 112,176 78                | 46 |
| 48 | Elgin, Joliet & Eastern.....                    | 38    | 13    | 7     | 7     | 337             | 219,217 85                | 317   | 317             | 203,509 15                | 48 |
| 51 | Fulton County Narrow Gauge.....                 | ..... | ..... | 4     | 4     | 96              | 26,804 42                 | 57    | 57              | 26,804 42                 | 51 |
| 53 | Grand Tower & Carbondale.....                   | 9     | ..... | ..... | 25    | 55              | 48,104 00                 | 96    | 96              | 48,104 00                 | 53 |
| 54 | Grand Tower & Cape Girardeau.....               | 452   | 254   | 31    | ..... | 10,680          | 6,219,981 84              | 55    | 55              | 16,228 31                 | 54 |
| 55 | Illinois Central.....                           | ..... | ..... | ..... | 1,668 | 107             | 53,270 00                 | 64    | 64              | 3,916,185 74              | 55 |
| 65 | Indiana & Illinois Southern.....                | 4     | 1     | ..... | 8     | .....           | .....                     | ..... | .....           | 29,650 00                 | 65 |

|    |  |        |       |       |         |                  |        |                 |    |
|----|--|--------|-------|-------|---------|------------------|--------|-----------------|----|
| 66 | Indianapolis, Decatur & Western.....                     | 8      | 7     | 34    | 411     | 204,322 50       | 198    | 91,968 86       | 66 |
| 67 | Indiana, Illinois & Iowa.....                            | 9      | 9     | ..... | 236     | 139,610 92       | 162    | 80,521 41       | 67 |
| 68 | Lova Central.....  | 22     | 29    | 87    | 1,131   | 679,557 32       | 195    | 105,144 59      | 68 |
| 69 | Lake Erie & Western.....                                 | 92     | 47    | 130   | 1,771   | 1,006,589 72     | 157    | 70,329 00       | 69 |
| 70 | Lake Erie & Michigan Southern.....                       | 1,363  | 451   | 354   | 13,667  | 7,767,022 80     | 1,333  | 757,284 72      | 70 |
| 71 | Lake Shore & Nashville.....                              | 41     | 22    | ..... | 1,283   | 684,144 96       | 1,181  | 593,558 92      | 71 |
| 72 | Louisville, Evansville & St. Louis, (Consolidated).....  | 52     | 3     | 6     | 1,013   | 503,331 37       | 181    | 71,886 41       | 72 |
| 73 | Louisville, New Albany & Chicago.....                    | 93     | 56    | 106   | 1,868   | 1,052,447 04     | 214    | 190,722 76      | 73 |
| 74 | Melbican Central.....                                    | 548    | 277   | 62    | 9,331   | 5,510,800 07     | 672    | 467,146 60      | 74 |
| 75 | Mobile & Ohio.....                                       | 26     | 18    | 76    | 742     | 5,412,346 69     | 742    | 412,346 60      | 75 |
| 76 | New York Chicago & St. Louis.....                        | 397    | 131   | 320   | 3,516   | 2,214,739 50     | 555    | 367,873 11      | 76 |
| 77 | Ohio & Mississippi.....                                  | 105    | 68    | 594   | 3,569   | 1,808,769 20     | 2,127  | 1,079,739 60    | 77 |
| 78 | Pawnee.....  | 271    | 235   | 619   | 5       | (1) 1,310 00     | 5      | 1,310 00        | 78 |
| 79 | Pennsylvania Co. (Op. Pittsburgh, Ft. Wayne & Chi.)..... | 5      | ..... | ..... | 8,445   | 5,054,371 87     | 295    | 158,951 19      | 79 |
| 80 | Pennsylvania Co. (Op. South Chicago & Southern).....     | 146    | 18    | ..... | 22      | 10,626 88        | 22     | 10,626 88       | 80 |
| 81 | Peoria & Pekin Union.....                                | 92     | 32    | 1     | 464     | 212,630 41       | 464    | 212,630 41      | 81 |
| 82 | Peoria, Decatur & Evansville.....                        | 3      | ..... | ..... | 583     | 270,825 48       | 496    | 239,268 43      | 82 |
| 83 | Quincy, Omaha & Kansas City.....                         | 8      | 3     | 16    | 210     | 109,109 00       | 317    | 3,273 27        | 83 |
| 84 | Rock Island and Peoria.....                              | 9      | 2     | 25    | 317     | 180,382 00       | 7      | 180,382 00      | 84 |
| 85 | St. Louis, Alton & Springfield.....                      | 39     | 17    | ..... | 867     | 44,541 59        | 131    | 62,550 00       | 85 |
| 86 | St. Louis, Alton & Terre Haute.....                      | 1      | ..... | ..... | 53      | 31,045 82        | 867    | 40,541 59       | 86 |
| 87 | St. Louis & Chicago.....                                 | 1      | 1     | 2     | 29      | 10,311 04        | 53     | 31,045 82       | 87 |
| 88 | Terminal Railroad Association of St. Louis.....          | 150    | 22    | 50    | 845     | 681,033 00       | 26     | 106,533 00      | 88 |
| 89 | Terre Haute & Indianapolis.....                          | 56     | 64    | 15    | 1,129   | 620,673 98       | 1,119  | 620,673 98      | 89 |
| 90 | Terre Haute & Peoria.....                                | 1      | 8     | 7     | 241     | 132,383 64       | 211    | 132,383 64      | 90 |
| 91 | Toledo, Peoria & Western.....                            | 41     | 32    | 78    | 627     | 381,178 19       | 621    | 377,098 19      | 91 |
| 92 | (2) Toledo, St. Louis & Kansas City.....                 | 48     | 28    | 21    | 888     | 583,226 38       | 226    | 174,967 31      | 92 |
| 93 | Wabash.....  | 532    | 278   | 736   | 8,697   | 5,736,554 98     | 2,869  | 1,912,184 99    | 93 |
| 94 | Wabash, Chester & Western.....                           | 1      | ..... | 1     | 62      | 30,821 48        | 62     | 30,821 48       | 94 |
| 95 | Wisconsin Central Lines.....                             | 150    | 70    | 128   | 2,897   | 1,846,319 44     | 291    | 128,369 47      | 95 |
| 96 | Totals.....  | 10,561 | 5,507 | 413   | 182,680 | \$107,705,205 49 | 57,435 | \$33,991,986 16 | 96 |

(1) Includes six months' salaries paid by Peoria &amp; Eastern Ry. Co., and six months' salaries paid by Ohio, Indiana &amp; Western Ry. Co.

(2) Does not include contractor's employees, to whom monthly allowance is made to cover cost of maintenance.

(3) Salaries for eight months.

(4) Salaries for six months.

TABLE XI.—Average Daily Compensation of Employés, for year ending June 30, 1890.

| NAME OF COMPANY. |   | 1                     | 2              | 3                   | 4          | 5       | 6           | 7               | 8          | 9          | 10             | 11              | 12             | 13                              | 14                                  | 15                                   | 16                               |
|------------------|---|-----------------------|----------------|---------------------|------------|---------|-------------|-----------------|------------|------------|----------------|-----------------|----------------|---------------------------------|-------------------------------------|--------------------------------------|----------------------------------|
|                  |   | General office clerks | Station agents | Other station men.. | Enginemenn | Firemen | Conductors. | Other trainmen. | Machinists | Carpenters | Other shopmen. | Section foremen | Other trackmen | Switchmen, flagmen and watchmen | Telegraph operators and dispatchers | Employees—Account floating equipment | All other employes and laborers. |
| 1                | Atchison, Topeka & Santa Fe.                | \$1 99                | \$1 65         | \$1 64              | \$4 42     | \$2 52  | \$2 85      | \$1 78          | \$2 07     | \$2 08     | \$1 64         | \$1 66          | \$1 50         | \$2 01                          | \$1 75                              | .....                                | \$1 87                           |
| 2                | Baltimore & Ohio.                           | 2 93                  | 2 22           | 1 75                | 4 07       | 2 34    | 3 55        | 2 32            | 2 30       | 1 73       | 1 99           | 1 55            | 1 14           | 2 77                            | 1 89                                | .....                                | 1 33                             |
| 3                | Belt Railway of Chicago.                    | 1 79                  | 1 85           | 1 58                | 2 50       | 1 64    | 2 74        | 2 07            | 1 58       | 2 17       | 1 64           | 1 39            | 1 30           | 1 01                            | 1 18                                | .....                                | 1 08                             |
| 4                | Centralia & Chester.                        | 2 50                  | 2 00           | 1 75                | 2 50       | 1 83    | 2 97        | 1 85            | .....      | 2 06       | 1 85           | 1 81            | 1 45           | 2 02                            | 1 91                                | .....                                | 1 75                             |
| 5                | Chicago & Alton.                            | 2 93                  | 1 98           | 1 66                | 3 85       | 3 43    | 3 83        | 1 96            | 2 08       | 1 84       | 1 81           | 1 76            | 1 22           | 2 02                            | 1 91                                | .....                                | 1 75                             |
| 6                | Chicago & Atlantic.                         | 2 55                  | 1 65           | 1 61                | 3 63       | 2 09    | 3 01        | 1 97            | 2 33       | 2 02       | 1 40           | 1 77            | 1 17           | 2 14                            | 1 80                                | .....                                | 1 53                             |
| 7                | Chicago & Eastern Illinois.                 | 2 12                  | 1 38           | 1 67                | 3 20       | 2 06    | 3 01        | 1 91            | .....      | 2 37       | 1 34           | 1 82            | 1 33           | 1 52                            | 1 81                                | .....                                | 1 53                             |
| 8                | Chicago and Western Indiana                 | 2 12                  | 1 38           | 1 67                | 3 20       | 2 06    | 3 01        | 1 91            | .....      | 2 37       | 1 34           | 1 82            | 1 33           | 1 52                            | 1 81                                | .....                                | 1 53                             |
| 9                | Chicago & Grand Trunk                       | 1 57                  | 1 90           | 1 62                | 3 45       | 1 91    | 3 07        | 1 96            | 2 12       | 2 37       | 1 34           | 1 82            | 1 33           | 1 52                            | 1 81                                | .....                                | 1 53                             |
| 10               | Chicago & Iowa.                             | 2 02                  | 1 05           | 1 67                | 3 45       | 1 91    | 3 07        | 1 96            | 2 12       | 2 37       | 1 34           | 1 82            | 1 33           | 1 52                            | 1 81                                | .....                                | 1 53                             |
| 11               | Chicago & Northwestern.                     | 2 55                  | 2 06           | 1 67                | 3 45       | 1 91    | 3 07        | 1 96            | 2 12       | 2 37       | 1 34           | 1 82            | 1 33           | 1 52                            | 1 81                                | .....                                | 1 53                             |
| 12               | Chicago & Ohio River.                       | 2 55                  | 2 06           | 1 67                | 3 45       | 1 91    | 3 07        | 1 96            | 2 12       | 2 37       | 1 34           | 1 82            | 1 33           | 1 52                            | 1 81                                | .....                                | 1 53                             |
| 13               | Chicago, Burlington & Northern.             | 2 59                  | 1 77           | 1 61                | 3 37       | 1 56    | 2 83        | 1 66            | 1 84       | 2 33       | 1 83           | 1 52            | 1 01           | 1 87                            | 1 60                                | .....                                | 1 48                             |
| 14               | Chicago, Burlington & Quincy.               | 2 59                  | 1 77           | 1 61                | 3 37       | 1 56    | 2 83        | 1 66            | 1 84       | 2 33       | 1 83           | 1 52            | 1 01           | 1 87                            | 1 60                                | .....                                | 1 48                             |
| 15               | Chicago, Milwaukee & St. Paul.              | 2 41                  | 2 22           | 1 88                | 3 58       | 2 21    | 3 12        | 1 85            | 2 61       | 2 32       | 1 68           | 1 79            | 1 27           | 1 99                            | 2 05                                | .....                                | 1 68                             |
| 16               | Chicago, Rock Island & Pacific.             | 2 41                  | 2 22           | 1 88                | 3 58       | 2 21    | 3 12        | 1 85            | 2 61       | 2 32       | 1 68           | 1 79            | 1 27           | 1 99                            | 2 05                                | .....                                | 1 68                             |
| 17               | Chicago, St. Louis & Pittsburgh.            | 2 53                  | 1 85           | 1 58                | 3 11       | 1 62    | 2 79        | 1 86            | 2 24       | 2 45       | 1 44           | 1 49            | 1 23           | 1 17                            | 1 62                                | .....                                | 1 81                             |
| 18               | Englewood Connecting.                       | .....                 | .....          | .....               | .....      | .....   | .....       | .....           | .....      | .....      | .....          | .....           | .....          | .....                           | .....                               | .....                                | 88                               |
| 19               | Chicago, St. Paul & Kansas City.            | 2 28                  | 1 63           | 1 51                | 3 70       | 2 10    | 2 86        | 1 68            | 2 40       | 2 00       | 1 97           | 1 48            | 1 16           | 2 05                            | 1 84                                | .....                                | 2 20                             |
| 20               | Cleveland, Cincinnati, Chicago & St. Louis. | 1 60                  | 1 66           | 1 15                | 3 60       | 2 10    | 3 10        | 1 65            | 2 15       | 2 00       | 1 55           | 1 75            | 1 20           | 1 50                            | 1 81                                | .....                                | 1 85                             |
| 21               | Kankakee & Seneca.                          | 1 50                  | 1 15           | 1 20                | 3 33       | 2 30    | 3 00        | 1 65            | 2 10       | 2 00       | 1 45           | 1 75            | 1 20           | 1 50                            | 1 81                                | .....                                | 1 85                             |
| 22               | Peoria & Eastern.                           | 1 98                  | 1 58           | 1 61                | 3 83       | 2 30    | 3 10        | 1 65            | 2 10       | 2 00       | 1 45           | 1 75            | 1 20           | 1 50                            | 1 81                                | .....                                | 1 85                             |
| 23               | East St. Louis & Carondelet.                | 2 28                  | 1 72           | 1 42                | 3 25       | 2 00    | 3 40        | 2 30            | 2 58       | 2 10       | 1 45           | 1 75            | 1 20           | 1 50                            | 1 81                                | .....                                | 1 85                             |
| 24               | East St. Louis Connecting.                  | .....                 | .....          | .....               | .....      | .....   | .....       | .....           | .....      | .....      | .....          | .....           | .....          | .....                           | .....                               | .....                                | 42                               |
| 25               | Elgin, Joliet & Eastern.                    | .....                 | .....          | .....               | .....      | .....   | .....       | .....           | .....      | .....      | .....          | .....           | .....          | .....                           | .....                               | .....                                | 43                               |
| 26               | Elgin, Joliet & Eastern.                    | .....                 | .....          | .....               | .....      | .....   | .....       | .....           | .....      | .....      | .....          | .....           | .....          | .....                           | .....                               | .....                                | 43                               |
| 27               | Fulton County Narrow Gauge.                 | .....                 | .....          | .....               | .....      | .....   | .....       | .....           | .....      | .....      | .....          | .....           | .....          | .....                           | .....                               | .....                                | 46                               |
| 28               | Grand Tower & Carondelet.                   | 2 51                  | 1 42           | 1 70                | 3 23       | 1 80    | 3 45        | 1 49            | 2 10       | 2 00       | 1 45           | 1 75            | 1 20           | 1 50                            | 1 81                                | .....                                | 1 85                             |
| 29               | Grand Tower & Carondelet.                   | .....                 | .....          | .....               | .....      | .....   | .....       | .....           | .....      | .....      | .....          | .....           | .....          | .....                           | .....                               | .....                                | 51                               |
| 30               | Grand Tower & Carondelet.                   | .....                 | .....          | .....               | .....      | .....   | .....       | .....           | .....      | .....      | .....          | .....           | .....          | .....                           | .....                               | .....                                | 51                               |
| 31               | Grand Tower & Cape Girardeau.               | 3 19                  | 1 35           | 1 34                | 3 08       | 1 97    | 3 55        | 1 15            | 2 69       | 2 32       | 1 33           | 1 72            | 1 10           | 2 00                            | .....                               | .....                                | 1 47                             |
| 32               | Illinois Central.                           | 1 59                  | 1 37           | 1 34                | 3 08       | 1 97    | 3 55        | 1 15            | 2 69       | 2 32       | 1 33           | 1 72            | 1 10           | 2 00                            | .....                               | .....                                | 1 47                             |
| 33               | Indiana & Illinois Southern.                | 2 36                  | 1 10           | 1 79                | 3 00       | 1 80    | 2 63        | 1 80            | 2 00       | 2 00       | 1 52           | 1 50            | 1 10           | 1 33                            | 1 90                                | .....                                | 1 33                             |
| 34               | Indianapolis, Decatur & Western.            | 1 98                  | 1 39           | 1 47                | 3 53       | 1 71    | 2 62        | 1 13            | 1 63       | 1 57       | 1 55           | 1 61            | 1 97           | 1 31                            | 1 62                                | .....                                | 1 66                             |

|    |  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 67 | Indiana, Illinois & Iowa.....                    | 1 53 | 1 54 | 1 85 | 1 08 | 1 22 | 1 43 | 2 32 | 2 61 | 2 07 | 3 01 | 1 94 | 3 20 | 1 43 | 2 16 |
| 68 | Iowa Central.....                                | 2 21 | 1 95 | 2 43 | 1 13 | 1 59 | 1 91 | 1 86 | 2 26 | 2 09 | 3 25 | 2 27 | 3 07 | 1 49 | 2 10 |
| 69 | Lake Erie & Western.....                         | 1 57 | 1 92 | 1 66 | 1 16 | 1 68 | 1 80 | 2 26 | 2 26 | 1 68 | 2 66 | 1 77 | 3 52 | 1 46 | 2 20 |
| 70 | Lake Shore & Michigan Southern.....              | 1 40 | 1 80 | 1 75 | 1 20 | 1 85 | 1 89 | 1 83 | 2 05 | 1 75 | 3 05 | 1 77 | 3 26 | 1 62 | 2 25 |
| 71 | Louisville & Nashville.....                      | 1 40 | 1 81 | 2 08 | 1 04 | 1 58 | 1 94 | 1 98 | 2 29 | 1 87 | 3 05 | 1 86 | 3 76 | 1 66 | 2 40 |
| 72 | Louisville, Evansville & St. Louis, Consolidated | 2 11 | 1 41 | 1 41 | 1 10 | 1 57 | 1 41 | 2 14 | 2 14 | 1 75 | 3 03 | 1 95 | 4 03 | 1 06 | 1 33 |
| 73 | Louisville, New Albany & Chicag.....             | 1 88 | 1 66 | 2 06 | 1 15 | 1 65 | 1 57 | 2 12 | 2 12 | 1 75 | 3 05 | 1 91 | 3 82 | 1 06 | 2 15 |
| 74 | Louisville, Chicago & St. Louis.....             | 1 79 | 2 00 | 2 00 | 1 21 | 1 75 | 1 49 | 2 28 | 2 28 | 1 72 | 3 19 | 1 73 | 3 13 | 1 46 | 2 19 |
| 75 | Michigan Central.....                            | 1 70 | 1 66 | 2 25 | 1 10 | 1 67 | 1 49 | 1 88 | 2 00 | 1 93 | 3 25 | 2 12 | 3 54 | 1 49 | 2 23 |
| 76 | Mobile & Ohio.....                               | 1 69 | 1 71 | 1 54 | 1 05 | 1 25 | 1 25 | 2 00 | 2 00 | 2 80 | 2 80 | 1 80 | 3 37 | 1 25 | 1 50 |
| 77 | New York, Chicago & St. Louis.....               | 2 10 | 1 53 | 1 53 | 1 25 | 1 82 | 1 65 | 2 59 | 2 59 | 2 15 | 3 16 | 2 05 | 3 51 | 1 71 | 2 78 |
| 78 | Ohio & Mississippi.....                          | 2 10 | 1 98 | 1 52 | 1 25 | 1 72 | 1 90 | 2 50 | 2 50 | 1 30 | 2 66 | 1 75 | 3 81 | 1 34 | 2 30 |
| 79 | Pennsylvania Co. (Op. Pittsb'gh, Ft. W. & Chi.)  | 60   | 2 00 | 1 45 | 1 02 | 1 60 | 1 83 | 2 35 | 2 35 | 2 01 | 3 06 | 1 76 | 3 94 | 1 25 | 2 33 |
| 80 | Pennsylvania Co. (Op. South Chi. & Southern)     | 41   | 1 54 | 1 95 | 1 10 | 1 68 | 1 90 | 1 87 | 1 73 | 1 63 | 2 81 | 1 80 | 3 85 | 1 89 | 2 33 |
| 81 | Peoria & Pekin Union.....                        | 1 18 | 1 49 | 1 65 | 1 02 | 1 54 | 1 68 | 2 01 | 2 01 | 1 72 | 2 87 | 1 85 | 3 36 | 1 52 | 2 25 |
| 82 | Peoria, Decatur & Evansville.....                | 2 00 | 1 23 | 1 70 | 1 17 | 1 35 | 1 54 | 2 50 | 2 50 | 1 92 | 3 85 | 1 92 | 3 29 | 1 73 | 2 04 |
| 83 | Quincy, Omaha & Kansas City.....                 | 55   | 2 00 | 1 40 | 1 20 | 1 35 | 1 54 | 2 50 | 2 50 | 1 92 | 3 85 | 1 92 | 3 29 | 1 73 | 2 04 |
| 84 | Rock Island & Peoria.....                        | 98   | 1 53 | 1 13 | 1 25 | 1 53 | 1 54 | 2 50 | 2 50 | 1 92 | 3 85 | 1 92 | 3 29 | 1 73 | 2 04 |
| 85 | St. Louis, Alton & Springfield.....              | 1 33 | 2 87 | 1 85 | 1 25 | 1 53 | 1 54 | 2 50 | 2 50 | 1 92 | 3 85 | 1 92 | 3 29 | 1 73 | 2 04 |
| 86 | St. Louis, Alton & Terre Haute.....              | 1 33 | 2 87 | 1 85 | 1 25 | 1 53 | 1 54 | 2 50 | 2 50 | 1 92 | 3 85 | 1 92 | 3 29 | 1 73 | 2 04 |
| 87 | St. Louis & Chicago.....                         | 1 33 | 2 87 | 1 85 | 1 25 | 1 53 | 1 54 | 2 50 | 2 50 | 1 92 | 3 85 | 1 92 | 3 29 | 1 73 | 2 04 |
| 88 | St. Louis & Peoria.....                          | 1 33 | 2 87 | 1 85 | 1 25 | 1 53 | 1 54 | 2 50 | 2 50 | 1 92 | 3 85 | 1 92 | 3 29 | 1 73 | 2 04 |
| 89 | Terminal Railroad Association of St. Louis.....  | 2 88 | 2 22 | 2 08 | 1 32 | 2 50 | 2 50 | 2 33 | 2 33 | 2 22 | 2 88 | 2 00 | 3 33 | 1 40 | 2 30 |
| 90 | Terre Haute & Indianapolis.....                  | 2 20 | 1 40 | 1 00 | 1 10 | 1 50 | 1 50 | 2 12 | 2 12 | 1 70 | 2 88 | 2 00 | 3 33 | 1 40 | 2 30 |
| 91 | Terre Haute & Peoria.....                        | 1 58 | 1 54 | 1 33 | 1 05 | 1 53 | 1 53 | 1 66 | 1 66 | 1 52 | 2 52 | 1 94 | 4 00 | 1 20 | 1 63 |
| 92 | Toledo, Peoria & Western.....                    | 1 11 | 1 23 | 1 30 | 1 05 | 1 53 | 1 53 | 2 46 | 2 46 | 1 70 | 2 52 | 1 94 | 4 00 | 1 20 | 1 63 |
| 93 | Toledo, St. Louis & Kansas City.....             | 1 11 | 1 23 | 1 30 | 1 05 | 1 53 | 1 53 | 2 46 | 2 46 | 1 70 | 2 52 | 1 94 | 4 00 | 1 20 | 1 63 |
| 94 | Wabash.....                                      | 1 11 | 1 23 | 1 30 | 1 05 | 1 53 | 1 53 | 2 46 | 2 46 | 1 70 | 2 52 | 1 94 | 4 00 | 1 20 | 1 63 |
| 95 | Wabash, Chester & Western.....                   | 1 11 | 1 23 | 1 30 | 1 05 | 1 53 | 1 53 | 2 46 | 2 46 | 1 70 | 2 52 | 1 94 | 4 00 | 1 20 | 1 63 |
| 96 | Wisconsin Central Lines.....                     | 1 91 | 1 75 | 1 16 | 1 16 | 1 56 | 1 56 | 2 34 | 2 34 | 1 58 | 2 88 | 2 19 | 3 25 | 1 55 | 2 03 |

TABLE XII.—Description of Equipment, Whole Line, for year ending June 30, 1890.

| NAME OF COMPANY.                               | LOCOMOTIVES.  |              |               |            |                             |                           |                            |                           |                |                | CARS IN PASSENGER SERVICE. |                 |                                    |             |            |                             |                                    |    |
|--|---------------|--------------|---------------|------------|-----------------------------|---------------------------|----------------------------|---------------------------|----------------|----------------|----------------------------|-----------------|------------------------------------|-------------|------------|-----------------------------|------------------------------------|----|
|  | 1             | 2            | 3             | 4          | 5                           | 6                         | 7                          | 8                         | 9              | 10             | 11                         | 12              | 13                                 | 14          | 15         | 16                          | 17                                 |    |
|  | Passenger.... | Freight..... | Switching.... | Total..... | Equipped with train brake.. | First-class pass.cars.... | Second class pass.cars.... | Combination pass.cars.... | Emigrant cars. | Dining cars... | Parlor cars....            | Sleeping cars.. | Baggage, express and postal cars.. | Others..... | Total..... | Equipped with train brake.. | Fitted with automatic coupler..... |    |
| 1 Atchison, Topeka & Santa Fe.....             | 5             | 9            | 3             | 17         | 17                          | 4                         |                            |                           |                |                |                            |                 | 2                                  |             | 6          |                             |                                    | 1  |
| 7 Belt Railway of Chicago.....                 |               | 19           |               | 19         | 19                          |                           |                            |                           |                |                |                            |                 |                                    |             |            |                             |                                    | 7  |
| 8 Centralia & Chester.....                     |               |              |               |            |                             |                           |                            |                           |                |                |                            |                 |                                    |             |            |                             |                                    | 8  |
| 9 Chicago & Alton.....                         | 50            | 131          | 47            | 228        | 139                         | 86                        | 1                          | 1                         |                | 4              |                            |                 | 40                                 |             | 132        | 132                         | 132                                | 9  |
| 12 Chicago & Atlantic.....                     | 15            | 42           | 15            | 72         | 23                          | 12                        | 5                          |                           | 12             |                |                            |                 | 7                                  | 1           | 37         | 37                          | 37                                 | 12 |
| 13 Chicago & Calumet Terminal.....             | 26            | 45           | 20            | 91         | 23                          | 38                        | 6                          | 9                         |                |                |                            |                 | 17                                 | 2           | 72         | 72                          | 72                                 | 13 |
| 14 Chicago & Eastern Illinois.....             |               | 11           |               |            |                             |                           |                            |                           |                |                |                            |                 |                                    |             |            |                             |                                    | 14 |
| 15 Chicago & Western Indiana.....              |               |              |               |            |                             |                           |                            |                           |                |                |                            |                 |                                    |             |            |                             |                                    | 15 |
| 17 Chicago & Grand Trunk.....                  | 25            | 86           | 20            | 131        | 125                         | 56                        |                            |                           |                | 2              |                            |                 | 19                                 |             | 47         | 47                          | 47                                 | 17 |
| 20 Chicago & Iowa.....                         | 7             | 8            | 1             | 16         | 16                          | 6                         |                            |                           |                |                |                            |                 | 145                                | 29          | 579        | 579                         | 579                                | 21 |
| 21 Chicago & Northwestern.....                 | 186           | 457          | 163           | 806        | 681                         | 308                       | 28                         | 49                        |                | 9              | 11                         |                 |                                    |             | 21         | 21                          | 21                                 | 22 |
| 22 Chicago & Northern Pacific.....             | 6             | 3            |               | 3          | 6                           | 17                        |                            |                           |                |                |                            |                 |                                    |             | 2          |                             |                                    | 23 |
| 23 Chicago & Ohio River.....                   |               |              |               |            |                             |                           |                            |                           |                |                |                            |                 | 10                                 | 1           | 37         | 37                          | 37                                 | 24 |
| 24 Chicago, Burlington & Northern.....         | 12            | 38           | 6             | 56         | 56                          | 20                        |                            |                           | 4              |                |                            |                 | 98                                 | 8           | 345        | 345                         | 345                                | 25 |
| 25 Chicago, Burlington & Quincy.....           | 79            | 296          | 94            | 469        | 469                         | 202                       | 30                         |                           | 7              |                |                            |                 |                                    |             | 20         | 20                          | 20                                 | 26 |
| 28 Chicago, Rock Island & Chicago.....         | (4)           | 30           | 30            | 30         | 30                          | 13                        |                            |                           |                |                |                            |                 | 245                                | 2           | 624        | 604                         | 581                                | 29 |
| 29 Chicago, Milwaukee & St. Paul.....          | (4)           | 259          | 435           | 776        | 319                         | 349                       |                            |                           | 10             | 9              |                            |                 |                                    |             | 26         | 26                          | 26                                 | 30 |
| 30 Chicago, Peoria & St. Louis.....            | 29            | 23           | 15            | 20         | 22                          | 111                       |                            |                           |                |                |                            |                 | 53                                 | 3           | 231        | 224                         | 224                                | 31 |
| 34 Chicago, Rock I-land & Pacific.....         | 152           | 284          | 88            | 524        | 213                         | 111                       |                            |                           | 11             | 10             | 24                         |                 | 45                                 |             | 126        | 126                         | 126                                | 36 |
| 36 Chicago, Rock I-land & Pittsburgh.....      | 36            | 126          | 41            | 203        | 195                         | 76                        |                            |                           | 2              |                |                            |                 | 11                                 | 12          | 69         | 69                          | 69                                 | 38 |
| 38 Chicago, St. Louis & Pittsburgh.....        | 26            | 51           | 5             | 82         | 82                          | 29                        |                            |                           | 3              | 3              |                            |                 | 75                                 |             | 283        | 283                         | 283                                | 39 |
| 39 Cleveland, Cincinnati, Chicago & St. L..... | 74            | 188          | 65            | 327        | 232                         | 111                       | 73                         | 22                        |                |                |                            |                 |                                    |             | 57         | 57                          | 57                                 | 43 |
| 43 Peoria & Eastern.....                       | 24            | 41           | 6             | 71         | 20                          | 21                        | 18                         | 1                         |                |                |                            |                 |                                    |             |            |                             |                                    | 45 |
| 45 East St. Louis & Carondelet.....            |               |              | 4             | 4          |                             |                           |                            |                           |                |                |                            |                 |                                    |             |            |                             |                                    | 46 |
| 46 East St. Louis Connecting.....              |               |              | 9             | 9          | 9                           |                           |                            |                           |                |                |                            |                 |                                    |             |            |                             |                                    | 48 |
| 48 Elgin, Joliet & Eastern.....                |               | 22           | 9             | 31         | 13                          | 1                         | 1                          | 1                         |                |                |                            |                 |                                    |             | 3          | 3                           | 3                                  | 51 |
| 51 Fulton County Narrow Gauge.....             | 1             | 3            |               | 4          |                             |                           |                            |                           |                |                |                            |                 | 1                                  |             | 5          | 5                           | 5                                  | 53 |
| 53 Grand Tower & Carbondale.....               |               | 2            | 2             | 6          | 2                           |                           |                            |                           |                |                |                            |                 |                                    |             |            |                             |                                    | 55 |
| 55 Illinois Central.....                       | 89            | 150          | 58            | 297        | 98                          | 135                       | 22                         | 11                        |                |                | 34                         |                 | 53                                 | 5           | 280        | 269                         | 269                                | 65 |
| 65 Indiana & Illinois Southern.....            | 1             | 3            |               |            |                             |                           |                            |                           |                |                |                            |                 |                                    |             |            |                             |                                    | 66 |
| 66 Indianapolis, Decatur & Western.....        | 5             | 11           | 2             | 18         | 18                          | 7                         |                            |                           |                |                |                            |                 |                                    |             | 18         | 18                          | 18                                 | 67 |
| 67 Indiana, Illinois & Iowa.....               | 2             | 10           |               | 12         |                             |                           | 2                          |                           |                |                |                            |                 |                                    |             | 4          |                             |                                    | 67 |





Table XII.—Continued.

| NAME OF COMPANY.                        | CARS IN FREIGHT SERVICE. |                |                 |                |                |                        |             |            |                              |                                    | CARS IN COMPANY'S SERVICE. |                 |                |             |            |                              |
|---|--------------------------|----------------|-----------------|----------------|----------------|------------------------|-------------|------------|------------------------------|------------------------------------|----------------------------|-----------------|----------------|-------------|------------|------------------------------|
|   | 18                       | 19             | 20              | 21             | 22             | 23                     | 24          | 25         | 26                           | 27                                 | Gravel cars....            | Derriek cars... | Caboose cars.. | Others..... | Total..... | Equipped with train brake... |
|   | Box cars.....            | Flat cars..... | Stock cars..... | Coal cars..... | Tank cars..... | Refrigerator cars..... | Others..... | Total..... | Equipped with train brake... | Fitted with automatic coupler..... |                            |                 |                |             |            |                              |
| 1 Atchison, Topeka & Santa Fe.....      | 825                      | 165            | 36              | 1,346          |                |                        |             | 2,372      |                              |                                    |                            | 3               |                | 4           | 10         | 1                            |
| 5 Baltimore & Ohio.....                 | 364                      |                |                 |                |                |                        |             | 364        |                              |                                    |                            |                 |                |             |            | 5                            |
| 7 Belt Railway of Chicago.....          |                          |                |                 |                |                |                        |             |            |                              |                                    |                            |                 |                |             | 9          | 8                            |
| 8 Centralia & Chester.....              | 2                        |                |                 |                |                |                        |             | 12         |                              |                                    |                            |                 |                |             |            | 9                            |
| 9 Chicago & Alton.....                  | 561                      | 1,848          | 1,407           |                |                |                        |             | 7,123      | 474                          |                                    | 92                         | 3               | 100            | 13          | 208        | 12                           |
| 12 Chicago & Atlantic.....              | 1,129                    | 416            | 1,112           | 510            |                | 130                    |             | 2,167      |                              |                                    |                            | 2               | 41             | 43          | 43         | 13                           |
| 13 Chicago & Calumet Terminal.....      |                          | 20             |                 |                |                |                        |             | 30         |                              |                                    |                            | 3               |                |             | 4          | 13                           |
| 14 Chicago & Eastern Illinois.....      | 1,628                    | 226            | 209             | 5,828          |                | 92                     |             | 7,983      |                              |                                    | 11                         | 3               | 47             | 11          | 71         | 14                           |
| 15 Chicago & Western Indiana.....       |                          | 80             |                 |                |                |                        |             | 50         |                              |                                    | 20                         |                 | 5              | 48          | 53         | 15                           |
| 16 Chicago & Grand Trunk.....           | 148                      | 145            | 15              |                |                |                        |             | 371        |                              |                                    |                            | 2               |                | 8           | 10         | 17                           |
| 17 Chicago & Iowa.....                  | 148                      | 1              |                 |                |                |                        |             | 136        | 11                           |                                    |                            |                 | 12             | 1           | 13         | 20                           |
| 20 Chicago & North-western.....         | 14,469                   | 2,197          | 1,861           | 1,956          |                | 156                    | 4,631       | 25,284     | 2,617                        | 2,309                              |                            | 29              | 451            | 185         | 615        | 21                           |
| 21 Chicago & Ohio River.....            | 6                        |                |                 |                |                |                        |             | 6          |                              |                                    |                            | 1               |                |             |            | 23                           |
| 22 Chicago & Burlington & Northern..... | 2,450                    | 100            | 300             | 500            |                |                        |             | 3,350      |                              |                                    |                            |                 |                |             | 292        | 24                           |
| 25 Chicago, Burlington & Quincy.....    | 12,857                   | 1,600          | 2,562           | 2,344          |                | 330                    |             | 19,693     | 2,341                        | 1,676                              |                            | 1               | 247            | 17          | 264        | 25                           |
| 28 Chicago, Milwaukee & St. Paul.....   | 386                      | 130            | 94              | 261            |                |                        |             | 871        |                              |                                    |                            |                 | 15             | 54          | 17         | 28                           |
| 29 Chicago, Milwaukee & St. Paul.....   | 14,814                   | 4,101          | 2,499           |                |                | 408                    |             | 21,882     | 289                          |                                    |                            | 10              | 450            | 54          | 514        | 29                           |
| 30 Chicago, Peoria & St. Louis.....     | 416                      | 2              |                 | 298            |                |                        |             | 716        |                              |                                    |                            | 7               | 67             | 75          | 75         | 30                           |
| 31 Chicago, Peoria & St. Louis.....     | 4,870                    | 866            | 1,139           | 547            |                | 70                     |             | 7,492      | 990                          | 990                                | 218                        | 2               | 187            | 40          | 407        | 34                           |
| 34 Chicago, Rock Island & Pacific.....  | 886                      | 321            | 294             |                |                |                        |             | 1,645      | 231                          | 231                                |                            | 1               | 110            | 10          | 125        | 36                           |
| 36 Chicago, St. Louis & Pittsburg.....  | 1,532                    | 357            |                 | 234            |                | 10                     | 5           | 2,587      |                              |                                    | 5                          | 3               | 72             | 31          | 106        | 38                           |
| 38 Chicago, St. Paul & Kansas City..... | 8,109                    |                | 1,081           | 3,606          |                | 200                    |             | 12,996     | 1,532                        | 3,432                              |                            | 9               | 141            | 62          | 212        | 39                           |
| 39 Cleve and Cincinnati.....            | 1,098                    |                | 219             | 533            |                |                        |             | 1,850      |                              |                                    |                            | 3               | 26             | 10          | 39         | 43                           |
| 40 Peoria & Eastern.....                |                          |                |                 |                |                |                        |             |            |                              |                                    |                            |                 | 1              | 4           | 5          | 45                           |
| 45 East St. Louis & Carondelet.....     |                          | 30             |                 |                |                |                        |             | 30         |                              |                                    |                            |                 |                |             |            | 46                           |
| 46 East St. Louis Connecting.....       |                          | 50             | 650             |                |                |                        |             | 700        |                              |                                    |                            | 1               | 22             |             | 23         | 48                           |
| 48 Elgin, Joliet & Eastern.....         | 41                       | 18             | 25              | 55             |                |                        | 8           | 147        |                              |                                    |                            |                 |                |             |            | 51                           |
| 51 Fulton County Narrow Gauge.....      | 6                        | 15             |                 | 65             |                |                        |             | 436        |                              |                                    |                            | 1               |                |             | 1          | 53                           |
| 53 Grand Tower & Carbondale.....        |                          |                |                 |                |                |                        | 350         | 10,785     | 200                          |                                    |                            | 4               | 217            | 34          | 255        | 55                           |
| 55 Illinois Central.....                | 6,374                    | 256            | 959             | 2,693          |                | 563                    |             | 10,785     |                              |                                    |                            |                 |                |             |            | 56                           |
| 63 Indiana & Illinois Southern.....     | 2                        |                | 100             |                |                |                        |             | 102        |                              |                                    |                            |                 |                |             |            | 65                           |
| 66 Indianapolis, Decatur & Western..... | 501                      | 71             | 89              | 110            |                |                        |             | 771        |                              |                                    |                            | 1               |                |             | 9          | 66                           |

|             |   |       |       |       |       |       |        |       |       |       |       |       |       |         |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
|-------------|---|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|---------|--------|--------|--------|----|-------|-------|---------|--------|--------|-----|-----|-------|-------|-------|----|---|
| 67          | Indiana, Illinois & Iowa.....                         | 5     | 863   | 47    | 108   | 2     | 175    | ..... | 6     | 20    | 44    | 56    | ..... | 67      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 68          | Iowa Central.....                                     | 1,791 | 657   | 57    | 277   | ..... | 1,637  | ..... | 2     | 6     | 15    | 37    | ..... | 68      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 71          | Lake Erie & Western.....                              | 7,371 | 2,128 | 1,417 | 4,138 | ..... | 2,722  | ..... | 3     | 35    | 7     | 45    | ..... | 71      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 72          | Lake Shore & Michigan Southern.....                   | 110   | 75    | 20    | 350   | ..... | 15,104 | 3,128 | 200   | 12    | 270   | 502   | ..... | 72      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 74          | Louisville & Nashville.....                           | 517   | 133   | 46    | 910   | ..... | 555    | 555   | 1     | 10    | 6     | 17    | 17    | 74      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 76          | Louisville, Evansville & St. Louis, Consolidated..... | 1,758 | 449   | 81    | 1,070 | ..... | 1,606  | ..... | 1     | 14    | 15    | ..... | ..... | 76      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 77          | Louisville, New Albany & Chicago.....                 | 4,211 | 2,970 | 1,322 | 514   | 32    | 3,445  | 4     | 1     | 35    | 30    | 66    | ..... | 77      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 78          | Michigan Central.....                                 | 114   | 50    | 18    | ..... | ..... | 9,113  | ..... | 26    | 7     | 274   | 49    | 330   | 78      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 80          | Mobile & Ohio.....                                    | 3,364 | 1,121 | 648   | 208   | ..... | 221    | 197   | ..... | ..... | ..... | 54    | 1     | 80      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 83          | New York Chicago & St. Louis.....                     | 1,877 | 289   | 108   | 250   | ..... | 5,491  | 150   | 4     | 77    | 1     | 82    | ..... | 83      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 85          | Ohio & Mississippi.....                               | 1     | ..... | ..... | ..... | ..... | 2,545  | ..... | ..... | 66    | 27    | 93    | ..... | 85      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 87          | Pawnee.....   | 4,628 | 450   | 2,242 | 2,435 | ..... | 9,755  | 1,621 | 4     | 162   | 6     | 172   | 14    | 87      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 88          | Pennsylvania Co. (Op. Pitts'b'n, Ft. W. & Chi.).....  | 25    | 3     | ..... | 15    | ..... | 40     | ..... | ..... | ..... | ..... | ..... | ..... | 88      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 88          | Pennsylvania Co. (Op. S. Chicago & Southern).....     | 3     | ..... | ..... | 150   | ..... | 156    | ..... | 1     | ..... | 1     | ..... | ..... | 88      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 92          | Peoria & Pekin Union.....                             | 1,300 | 129   | 92    | 346   | ..... | 1,867  | ..... | 6     | 11    | 90    | 108   | ..... | 92      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 93          | Peoria, Decatur & Evansville.....                     | 42    | 20    | 46    | 29    | ..... | 137    | ..... | 1     | 57    | 57    | 57    | ..... | 93      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 94          | Quincy, Ottumwa & Kansas City.....                    | 194   | 30    | 30    | 147   | ..... | 401    | ..... | 1     | 6     | 2     | 9     | ..... | 94      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 95          | Rock Island & Peoria.....                             | 15    | 20    | ..... | 20    | ..... | 55     | ..... | 1     | ..... | 2     | ..... | ..... | 95      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 96          | St. Louis, Alton & Springfield.....                   | 238   | 154   | 23    | 1,117 | 13    | 1,575  | ..... | 1     | 15    | 27    | 43    | ..... | 96      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 98          | St. Louis, Alton & Terre Haute.....                   | 20    | 3     | ..... | 17    | ..... | 40     | ..... | 1     | ..... | 1     | ..... | ..... | 98      |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 105         | St. Louis & Chicago.....                              | ..... | ..... | ..... | ..... | ..... | 200    | ..... | ..... | ..... | ..... | ..... | ..... | 105     |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 106         | St. Louis & Peoria.....                               | ..... | 25    | ..... | 200   | ..... | 25     | ..... | 1     | 4     | 5     | ..... | ..... | 106     |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 107         | Terminal Railroad Association of St. Louis.....       | 805   | 83    | 299   | 455   | ..... | 1,612  | ..... | 1     | 27    | 16    | 149   | ..... | 107     |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 108         | Terre Haute & Indianapolis.....                       | 36    | 11    | 24    | 64    | ..... | 203    | ..... | 105   | 1     | 8     | 18    | ..... | 108     |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 110         | Terre Haute & Peoria.....                             | 412   | 11    | 125   | 266   | 8     | 837    | 58    | ..... | 16    | 10    | 27    | ..... | 110     |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 111         | Toledo, Peoria & Western.....                         | 1,013 | 398   | 199   | 300   | ..... | 1,860  | ..... | 1     | 32    | 3     | 35    | ..... | 111     |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 112         | Toledo, St. Louis & Kansas City.....                  | 6,104 | 3,546 | 1,553 | ..... | 100   | 11,453 | 500   | 90    | 128   | 10    | 74    | 416   | 112     |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 114         | Wabash.....   | 29    | 2     | 5     | 23    | ..... | 33     | ..... | 1     | 20    | 1     | 3     | ..... | 114     |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 115         | Wabash, Chester & Western.....                        | 737   | 445   | 117   | ..... | ..... | 2,131  | ..... | 1     | 1     | 1     | ..... | ..... | 115     |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| 116         | Wisconsin Central Lines.....                          | ..... | ..... | ..... | ..... | ..... | 882    | ..... | 1     | 60    | 4     | 65    | ..... | 116     |        |        |        |    |       |       |         |        |        |     |     |       |       |       |    |   |
| Totals..... |   |       |       |       |       |       |        |       |       |       |       |       |       | 113,891 | 24,972 | 22,888 | 36,737 | 32 | 2,120 | 6,502 | 207,142 | 11,481 | 16,549 | 817 | 130 | 3,560 | 1,285 | 5,792 | 52 | 9 |



|  |         |         |        |     |
|--|---------|---------|--------|-----|
| Indianapolis, Decatur & Western .....                        | 798     | 816     | 18     | 66  |
| Indiana, Illinois & Iowa .....                               | 235     | 247     | .....  | 67  |
| Iowa Central & Western .....                                 | 1,783   | 1,783   | 33     | 68  |
| Lake Erie & Western .....                                    | 3,327   | 3,417   | 102    | 69  |
| Lake Shore & Michigan Southern .....                         | 21,092  | 21,634  | 530    | 71  |
| Louisville & Nashville .....                                 | 585     | 615     | 372    | 72  |
| 74 Louisville & Nashville .....                              | 1,659   | 1,701   | 38     | 73  |
| 76 Louisville, Evansville & St. Louis, Consolidated .....    | 3,571   | 1,100   | 498    | 74  |
| 77 Louisville, New Albany & Chicago .....                    | 12,356  | 3,652   | 77     | 75  |
| 78 Michigan Central .....                                    | 286     | 13,377  | 543    | 76  |
| 80 (1) Mobile & Ohio .....                                   | 7,015   | 300     | 221    | 77  |
| 83 N. W. York, Chicago & St. Louis .....                     | 2,745   | 7,173   | 240    | 78  |
| 85 Ohio & Mississippi .....                                  | 2       | 2,858   | 107    | 80  |
| 87 Pawnee .....  | 10,143  | 3       | 250    | 81  |
| 88 Pennsylvania Co. (Operat'g Pittsb'g, Ft. W. & Chl.) ..... | 55      | 60      | 2,146  | 87  |
| 88 Pennsylvania Co. (Op. St. Chicago & Southern) .....       | 158     | 170     | 20     | 88  |
| 92 Peoria & Pekin Union .....                                | 1,994   | 2,026   | 1      | 15  |
| 93 Peoria, Decatur & Evansville .....                        | 200     | 208     | 51     | 92  |
| 94 Quincy, Omaha & Kansas City .....                         | 420     | 435     | 14     | 93  |
| 95 Rock Island & Peoria .....                                | 69      | 74      | 9      | 94  |
| 96 St. Louis, Alton & Springfield .....                      | 1,644   | 1,074   | 5      | 9   |
| 98 St. Louis, Alton & Terre Haute .....                      | 47      | 54      | 56     | 96  |
| 105 St. Louis & Chicago .....                                | 201     | 202     | 13     | 98  |
| 106 St. Louis & Peoria .....                                 | 37      | 59      | 2      | 6   |
| 107 Terminal Railroad Association of St. Louis .....         | 1,822   | 1,869   | 50     | 105 |
| 108 Terre Haute & Indianapolis .....                         | 232     | 245     | 17     | 106 |
| 110 Terre Haute & Peoria .....                               | 885     | 927     | 97     | 107 |
| 111 Toledo, Peoria & Western .....                           | 2,256   | 2,322   | 63     | 31  |
| 112 Toledo, St. Louis & Kansas City .....                    | 14,003  | 14,400  | 1,007  | 11  |
| 114 Wabash .....   | 65      | 68      | 1      | 110 |
| 115 Wabash, Chester & Western .....                          | 2,246   | 2,310   | 114    | 20  |
| 116 Wisconsin Central Lines .....                            | 235,215 | 242,171 | 836    | 112 |
| Totals .....   | 17,510  | 1,102   | 22,154 | 115 |
|  |         |         |        | 116 |

(d) Illinois proportion of entire equipment.





|    |                                       |       |        |               |             |           |     |
|----|---------------------------------------|-------|--------|---------------|-------------|-----------|-----|
| 30 | Chicago, Peoria & St. Louis           | 45.20 | 100.00 | (10) 3,000.00 | (11) 52,058 | 3,000     | 35  |
| 31 | Jacks-nville Southern em.             | 38.45 | 73.85  |               |             | 3,000     | 31  |
| 32 | Lairfield, Carrollton & Western       | 13.45 | 33.65  |               |             | 3,000     | 15  |
| 33 | Louisville & St. Louis                |       | 16.40  |               |             | 3,000     | 32  |
| 34 | Chicago, Rock Island & Pacific        |       | 187.70 | 3,321.00      | 87,320      | 2,610     | 48  |
| 35 | Peoria & Bureau Valley                |       | 46.70  |               | 30,674      | 2,640     | 34  |
| 36 | Chicago, St. Louis & Pittsburgh       |       | 28.00  | 889.40        | 20,426      | 2,800     | 7   |
| 37 | Englewood Connecting                  |       | 2.35   |               |             |           | 10  |
| 38 | Chicago, St. Paul & Kansas City       |       | 146.73 | 80.00         | 1,471       | 3,000     | 32  |
| 39 | Cleveland, Cin., Chicago & St. L. (4) | 1.90  | 477.70 | 1,196.10      | 144,692     | 2,640     | 18  |
| 40 | Kankakee & Seneca                     |       | 40.18  |               | 1,553       | 2,800     | 12  |
| 41 | Peoria & Eastern                      |       | 122.50 |               | 5,000       | 2,640     | 22  |
| 42 | Depue, Ladd & Eastern                 | 6.25  | 3.50   |               |             |           | 44  |
| 43 | East St. Louis & Carondelet           |       | 5.76   | 50.00         | 4,043       | 2,640     | 2   |
| 44 | East St. Louis Connecting             |       | 1.80   | 63.00         | 1,340       | 2,240     | 40  |
| 45 | Electric City & Illinois (under con)  |       | 1.50   |               |             |           | 47  |
| 46 | Elgin, Joliet & Eastern               |       | 81.90  |               |             | 3,000     | 21  |
| 47 | Gauher, Coal C. y & Northern          |       | 33.58  |               |             | 3,000     | 8   |
| 48 | Waukegan & Southwestern               |       | 35.60  |               |             | 3,000     | 50  |
| 49 | Fulton County Narrow Gauge            | 31.00 |        |               | 106,800     | 2,700     | 7   |
| 50 | Fulton County Extension               | 30.00 |        |               | 7,011       | 2,640     | 4   |
| 51 | Grand Tower & Carbondale              | 3.00  |        |               | 21,123      | 2,700     | 3   |
| 52 | Grand Tower & Cape Girardeau          |       |        |               | 5,785       | 2,640     | 8   |
| 53 | Illinois Central                      |       | 23.20  | (3) 27,481.52 | (3) 294,352 | (3) 2,854 | 360 |
| 54 | Chicago, Havana & Western             | 17.33 | 765.37 |               |             |           |     |
| 55 | Chicago, Madison & Northern           | 58.77 | 72.85  |               |             |           |     |
| 56 | Chicago & Springfield                 |       | 130.83 |               |             |           |     |
| 57 | Dunleith & Dubuque Bridge Co          | 32    | 111.15 |               |             |           |     |
| 58 | Kankakee & Southwestern               |       | 17     |               |             |           |     |
| 59 | Mound City                            | 59.57 | 71.69  |               |             |           |     |
| 60 | South Chicago                         | 16.18 | 50.13  |               |             |           |     |
| 61 | St. Charles Air line                  |       | 4.76   |               |             |           |     |
| 62 | Indiana & Illinois Southern           | 56.00 |        |               |             |           |     |
| 63 | Indianapolis, Decatur & Western       |       | 75.76  |               | 8,500       | 2,640     | 8   |
| 64 | Iowa Central                          | 10.65 | 67.75  | 166.00        | 26,712      | 2,610     | 14  |
| 65 | Keokuk & Iowa                         |       | 78.00  | 299.12        | 8,970       | 2,800     | 17  |
| 66 | Keokuk & Iowa                         |       | 1.10   |               | 43,797      | 2,800     | 21  |
| 67 | Keokuk & Iowa                         |       | 4.00   |               |             |           |     |
| 68 | Peoria Terminal                       |       | 118.60 | 544.10        | 55,236      | 2,800     | 27  |
| 69 | Lake Erie & Western                   |       | 14.02  | 361.40        | 26,964      | 2,640     | 10  |
| 70 | Lake Erie & Western                   | 2.50  |        |               |             |           |     |
| 71 | Lake Erie & Western                   |       | 134.97 | 162.02        |             |           |     |
| 72 | Lake Erie & Western                   | 45.00 | 163.53 | 214.00        | 79,453      | 2,816     | 47  |
| 73 | Liverpool Coal                        |       | 6.07   |               | 19,940      | 2,800     | 15  |
| 74 | Louisville & Nashville*               |       | 29.00  |               | 11,252      | 2,700     | 6   |
| 75 | South-east & St. Louis                |       | 160.60 |               | 18,393      | 2,992     | 46  |
| 76 | Louisville, Evansville & St. L., Con. |       |        |               |             |           |     |
| 77 | Michigan Central                      |       |        |               |             |           |     |
| 78 | Joliet & Northern Indiana             |       |        |               |             |           |     |
| 79 | Mobile & Ohio*                        |       |        |               |             |           |     |
| 80 | St. Louis & Cairo                     |       |        |               |             |           |     |
| 81 |                                       |       |        |               |             |           |     |

Table XIII.—Continued.

| NAME OF COMPANY.                           | 1      | 2                              | 3                           | 4                              | 5                             | 6     | 7                        | 8                            |
|--|--------|--------------------------------|-----------------------------|--------------------------------|-------------------------------|-------|--------------------------|------------------------------|
|  | RAILS. |                                |                             | Steel.                         | TIES.                         |       | Number of stations ..... | Length of road unfenced. . . |
|  | Iron.  |                                | Number laid during year.    |                                | Average number per mile. .... |       |                          |                              |
|  |        | Number of miles—main line..... | Tons laid during year ..... | Number of miles—main line..... | Tons laid during year .....   |       |                          |                              |
| 83 New York, Chicago & St. Louis*          |        |                                |                             |                                | 3,680                         | 3,000 | 5                        | 88                           |
| 84 Chicago & State Line.....               |        |                                | 9.96                        |                                | 122,584                       | 3,600 | 71                       | 85                           |
| 85 Ohio & Mississippi .....                | 104.57 |                                | 270.65                      | 2,780.26                       |                               | 2,640 |                          | 86                           |
| 86 Ohio, Indiana & Western .....           |        |                                |                             | 2,243.00                       | 16,261                        |       | 2                        | 87                           |
| 87 Pawnee .....                            | 4.11   |                                |                             |                                |                               | 2,640 |                          | 88                           |
| 88 Pennsylvania Co*                        |        |                                |                             |                                |                               |       |                          | 89                           |
| 89 Calumet River .....                     |        |                                | 4.43                        | 1,302.25                       |                               | 2,640 |                          | 90                           |
| 90 Pittsburg, Ft. Wayne & Chicago.....     |        |                                | 16.32                       |                                | 28,096                        |       | 10                       | 91                           |
| 91 South Chicago & Southern .....          |        |                                | 10.32                       | 72.18                          | 1,453                         | 3,816 | 2                        | 92                           |
| 92 Peoria & Pekin Union .....              |        |                                | 18.91                       | 252.77                         | 13,900                        | 2,770 | 12                       | 93                           |
| 93 Peoria, Decatur & Evansville .....      | 11.80  |                                | 181.12                      | 1,453.00                       | 25,966                        | 2,800 | 94                       | 94                           |
| 94 Rock Island & Peoria.....               |        |                                | 113.00                      | 200.00                         | 25,000                        | 2,800 | 26                       | 95                           |
| 95 Rock Island & Peoria.....               |        |                                | 15.00                       | 88.00                          | 12,781                        | 2,800 | 6                        | 96                           |
| 96 St. Louis, Alton & Springfield .....    | 68.00  |                                | 14.40                       | 111.00                         | 3,000                         | 2,800 | 4                        | 97                           |
| 97 St. Louis, Alton & Terre Haute.....     |        |                                | 17.29                       |                                | 11,493                        | 2,800 | 13                       | 98                           |
| 98 Belleville & Carondelet.....            | 56.20  |                                |                             |                                | 19,782                        | 2,800 | 15                       | 99                           |
| 99 Belleville & Eldorado.....              |        |                                | 56.40                       | 547.00                         | 5,149                         | 2,800 | 13                       | 100                          |
| 100 Belleville & Southern Illinois.....    |        |                                | 53.50                       | 13.00                          | 10,013                        | 2,800 | 5                        | 101                          |
| 101 Chicago, St. Louis & Paducah .....     |        |                                | 29.74                       |                                | 5,168                         | 2,800 | 10                       | 102                          |
| 102 Chicago, St. Louis & Paducah .....     |        |                                | 17.94                       |                                | 3,500                         | 2,800 | 10                       | 103                          |
| 103 St. Louis Southern .....               |        |                                | 11.88                       |                                |                               | 2,640 | 3                        | 104                          |
| 104 Carbondale & Shawneetown .....         |        |                                |                             |                                | 850                           |       |                          | 105                          |
| 105 St. Louis & Chicago .....              |        |                                | 14.00                       |                                |                               |       |                          | 106                          |
| 106 St. Louis & Chicago .....              |        |                                |                             |                                |                               |       |                          | 107                          |
| 107 Terminal Railroad Ass'n of St. L.....  |        |                                |                             |                                |                               |       |                          | 108                          |
| 108 Terre Haute & Indianapolis*            |        |                                | 158.30                      | 677.03                         | 76,178                        | 640   | 41                       | 109                          |
| 109 St. Louis, Vandalia & Terre Haute..... |        |                                | 20.00                       |                                | 28,500                        | 2,640 | 38                       | 110                          |
| 110 Terre Haute & Peoria.....              |        |                                | 208.46                      | 509.50                         | 52,694                        | 2,800 | 54                       | 111                          |
| 111 Toledo, Peoria & Western.....          | 21.64  |                                |                             |                                |                               |       |                          |                              |

|     |                                       |          |          |           |           |        |       |          |     |
|-----|---------------------------------------|----------|----------|-----------|-----------|--------|-------|----------|-----|
| 112 | Toledo, St. Louis & Kansas City ..... | .....    | 179.49   | 1,502.00  | 51,561    | 2,640  | 41    | 8.00     | 112 |
| 113 | Union Stock Yards & Transit Co. ....  | .....    | 50.00    | .....     | .....     | .....  | ..... | .....    | 113 |
| 114 | Wabash .....                          | 45.20    | 625.10   | 2,613.77  | 28,410    | 3,000  | 187   | 237.50   | 114 |
| 115 | Wabash, Chester & Western .....       | 14.83    | 27.43    | 150.00    | 10,200    | 2,700  | 17    | 32.00    | 115 |
| 116 | Wisconsin Central Lines* .....        | .....    | .....    | .....     | .....     | .....  | ..... | .....    | 116 |
| 117 | Chicago & Wisconsin .....             | .....    | 49.36    | 210.00    | 20,400    | 23,000 | 15    | .....    | 117 |
|     | Totals .....                          | 1,181.27 | 8,982.19 | 74,555.11 | 3,112,789 | .....  | 2,459 | 1,477.70 |     |





|    |                                      |           |    |        |        |
|----|--------------------------------------|-----------|----|--------|--------|
| 30 | Chicago, Peoria & St. Louis.         | 118.10    | 1  | (12)29 | 31     |
| 31 | Jacksonville Southern em.            | 12.30     |    |        | 31     |
| 32 | Litchfield, Carrollton & Western.    | 51.40     |    |        | 32     |
| 33 | Louisville & St. Louis.              | 16.00     |    |        | 33     |
| 34 | Chicago, Rock Island & Pacific.      | 11.00     | 25 | 94     | 6,003  |
| 35 | Peoria & Bureau of Valley.           | 41.70     | 1  | 4      | 3,334  |
| 36 | Chicago, St. Louis & Pittsburgh.     | 25.00     |    |        | 118    |
| 37 | Chicago, St. Louis & Peoria.         | 3.00      |    |        | 3,385  |
| 38 | Englewood Connecting.                | 2.35      |    |        | 37     |
| 39 | Chicago, St. Paul & Kansas City.     | 49.68     | 7  | 1      | 186    |
| 40 | Cleveland, Cin. Chicago & St. L.     | 42.08     | 4  | 25     | 328    |
| 41 | Kankakee & Seneca.                   | 6.00      | 3  | 5      | 31,415 |
| 42 | Peoria & Eastern.                    | 12.01     |    | 1      | 2,588  |
| 43 | East St. Louis & Carondelet.         | 1.80      |    | 3      | 43     |
| 44 | East St. Louis Connecting.           |           |    |        | 43     |
| 45 | Elgin, Joliet & Eastern.             |           |    |        | 43     |
| 46 | Gardner, Coal City & Northern.       | 81.80     |    |        | 43     |
| 47 | Waukegan & Southwestern.             | 35.60     |    |        | 43     |
| 48 | Fulton County Narrow Gauge.          |           |    |        | 43     |
| 49 | Fulton County Extension.             | 20.20     |    |        | 43     |
| 50 | Grand Tower & Carbondale.            | 8.00      |    |        | 43     |
| 51 | Illinois Central.                    | (3) 35.31 |    |        | 43     |
| 52 | Indianapolis, Decatur & Western.     | 10.80     |    |        | 43     |
| 53 | Indianapolis, Decatur & Western.     | 36.00     |    |        | 43     |
| 54 | Indiana, Illinois & Iowa.            | 2.06      |    |        | 43     |
| 55 | Iowa Central.                        | 2.50      |    |        | 43     |
| 56 | Lake Erie & Western.                 | 7.52      |    |        | 43     |
| 57 | Lake Erie & Western.                 | 44.76     |    |        | 43     |
| 58 | Louisville & Nashville.              | 6.07      |    |        | 43     |
| 59 | Louisville & Nashville.              | 29.00     |    |        | 43     |
| 60 | Southwest and St. Louis.             | 50.00     |    |        | 43     |
| 61 | Toussaint, Evansville & St. L., Con. | 2.00      |    |        | 43     |
| 62 | Michigan Central.                    |           |    |        | 43     |
| 63 | Joliet & Northern Indiana.           | 8.50      |    |        | 43     |
| 64 | Mobile & Ohio.                       |           |    |        | 43     |
| 65 | St. Louis & Cairo.                   |           |    |        | 43     |
| 66 | New York, Chicago & St. Louis.       | 9.96      |    |        | 43     |
| 67 | Chicago & State Line.                | 71.35     |    |        | 43     |
| 68 | Ohio & Mississippi.                  |           |    |        | 43     |
| 69 | Pawnee.                              |           |    |        | 43     |
| 70 | Pennsylvania Co.                     |           |    |        | 43     |
| 71 | Calumet River.                       | 4.43      |    |        | 43     |
| 72 | Pittsburgh, t. Wayne & Chicago.      |           |    |        | 43     |
| 73 | South Chicago & Southern.            | 10.25     |    |        | 43     |
| 74 | Peoria & Pekin Union.                | (7) 18.01 |    |        | 43     |
| 75 | Peoria, Decatur & Evansville.        |           |    |        | 43     |
| 76 | Rock Island & Peoria.                | 192.92    |    |        | 43     |
| 77 | St. Louis, Alton & Springfield.      | 6.00      |    |        | 43     |
| 78 |                                      | 70.00     |    |        | 43     |

Table XIII.—Continued.

| NAME OF COMPANY.                           | 9                  | 10                            | 11                 | 12                 | 13                 | 14                | 15               | 16                | 17                 | 18                 | 19                            |
|--|--------------------|-------------------------------|--------------------|--------------------|--------------------|-------------------|------------------|-------------------|--------------------|--------------------|-------------------------------|
|  | BALLAST.           |                               |                    |                    |                    | BRIDGES.          |                  |                   |                    | TRESTLES AND PILE. |                               |
|  | Miles of stone.... | Miles of sand and gravel..... | Miles of cinders.. | Miles of earth.... | Miles of slag..... | No. of stone..... | No. of iron..... | No. of wooden.... | No. of combination | Number.....        | Aggregate length in feet..... |
| 98 St. Louis, Alton & Terre Haute.....     | 5.50               |                               |                    | 8.90               |                    |                   | 1                |                   |                    | 7                  | 2,189                         |
| 99 Belleville & Carondelet.....            |                    |                               |                    | 17.30              |                    |                   |                  |                   | 3                  | 25                 | 2,250                         |
| 100 Belleville & Eldorado.....             |                    |                               |                    | 50.20              |                    |                   |                  |                   |                    | 98                 | 9,865                         |
| 101 Belleville & Southern Illinois.....    |                    |                               | 1.50               | 54.90              |                    |                   | 1                |                   |                    | 55                 | 3,342                         |
| 102 Chicago, St. Louis & Paducah.....      | 7.00               |                               | .75                | 45.75              |                    |                   |                  |                   | 13                 | 87                 | 10,372                        |
| 103 St. Louis Southern.....                |                    |                               |                    | 29.74              |                    |                   |                  |                   | 3                  | 43                 | 8,761                         |
| 104 Carbondale & Shawneetown.....          |                    |                               |                    | 17.50              |                    |                   |                  |                   |                    | 23                 | 1,530                         |
| 105 St. Louis & Chicago.....               |                    |                               | 4.00               | 47.25              |                    |                   |                  |                   | 3                  | 35                 | 7,278                         |
| 106 St. Louis & Peoria.....                |                    |                               |                    | 14.00              |                    |                   |                  | 22                |                    |                    | 106                           |
| 107 Terminal R. R. Ass'n of St. Louis..... |                    |                               | 1.09               |                    |                    |                   |                  |                   |                    |                    | 107                           |
| 108 Terre Haute & Indianapolis*.....       |                    |                               |                    |                    |                    |                   |                  |                   |                    |                    | 108                           |
| 109 St. Louis, Vandalia & Terre Haute..... | 38.20              | 119.60                        | .50                | 144.74             |                    | 1                 | 1                | 4                 |                    | 144                | 12,990                        |
| 110 Terre Haute & Peoria.....              |                    |                               |                    | 225.10             |                    |                   | 7                | 10                |                    | 104                | 110                           |
| 111 Toledo, Peoria & Western.....          |                    | 2.00                          | 3.00               | 94.69              |                    | 6                 | 22               | 51                | 4                  | 329                | 17,204                        |
| 112 Toledo, St. Louis & Kansas City.....   |                    | 84.80                         |                    | 260.50             |                    |                   | 2                |                   | 8                  | 157                | 31,658                        |
| 113 Wabash.....                            | 41.75              | 275.25                        | 90.50              | 42.26              |                    | 14                | 28               | 6                 |                    | 1,235              | 57,368                        |
| 114 Wabash, Chester & Western.....         |                    |                               |                    |                    |                    |                   |                  |                   | 1                  | 64                 | 7,184                         |
| 115 Wisconsin Central Lines*.....          |                    | 45.66                         |                    | 3.70               |                    |                   | 2                | 1                 |                    |                    | 115                           |
| 116 Chicago & Wisconsin.....               |                    |                               |                    |                    |                    |                   |                  |                   |                    | 42                 | 2,708                         |
| 117 Totals.....                            | 891.80             | 4,412.08                      | 500.14             | 4,043.83           | 81.83              | 1,020             | 621              | 1,399             | 148                | 9,237              | 772,527                       |

(1) Includes 62 piling. (2) Includes 6.90 miles of mixed ballast. (3) Includes line of proprietary companies. (4) Includes line leased from St. L., A. & T. H. R. R. Co. (5) Includes gravel ballast. (6) Includes one steel bridge. (7) Includes cinders and earth. (8) Includes slack. (9) Includes burnt clay. (10) Includes rails laid on J. S. E., L. C. & W., and L. & St. L. R. R's. (11) Includes ties laid on J. S. E., L. C. & W., and L. & St. L. R. R's. (12) Includes bridges and trestles on J. S. E., L. C. & W., and L. & St. L. R. R's. \*Inserted to show relation of roads following.

TABLE XIV.—Consumption of Fuel by Locomotives, whole line, for year ending June 30, 1890.

|    | NAME OF COMPANY. |          |             |          |                           |                                   |
|----|------------------|----------|-------------|----------|---------------------------|-----------------------------------|
|    | 1                | 2        | 3           | 4        | 5                         | 6                                 |
|    | PASSENGER.       |          |             |          |                           |                                   |
|    | COAL—Tons.       |          | WOOD—Cords. |          | Total fuel consumed—tons. | Average pounds consumed per mile. |
|    | Bituminous.      | Hard.    | Hard.       | Soft.    |                           |                                   |
| 1  | 39,044.00        | 746.00   |             |          | 39,541.00                 | 991,913.00                        |
| 5  | 42,296.00        |          | 270.00      |          | 42,431.00                 | 1,115,473.00                      |
| 9  | 74,891.00        | 1,928.00 |             |          | 76,176.00                 | 2,164,335.00                      |
| 12 | 29,671.00        | 325.00   |             |          | 29,996.00                 | 818,531.00                        |
| 14 | 21,323.00        | 380.00   |             |          | 21,583.00                 | 785,237.00                        |
| 17 | 41,854.05        |          |             |          | 41,854.05                 | 1,296,414.00                      |
| 21 | 218,162.00       | 3,750.00 |             | 5,648.00 | 223,506.00                | 6,880,622.00                      |
| 24 |                  |          |             |          |                           | 619,113.00                        |
| 25 | 128,867.75       | 2,345.00 |             |          | 130,461.08                |                                   |
| 29 | 292,721.00       |          | 9,138.00    |          | 297,290.00                | 7,431,427.00                      |
| 36 | 57,222.00        | 1,047.00 |             |          | 57,920.00                 | 2,197,822.00                      |
| 38 | 53,588.00        | 1,175.00 |             |          | 55,938.00                 | 1,351,393.00                      |
| 39 | 102,825.25       |          |             |          | 102,825.25                | 3,426,680.00                      |
| 42 | 912.00           |          |             |          | 912.00                    | 25,317.00                         |
| 43 | 10,529.00        |          |             |          | 10,529.00                 | 350,990.00                        |
| 48 | 925.00           | 29.50    |             |          | 945.00                    | 32,631.00                         |
| 51 | 711.00           | 24.00    |             |          | 727.00                    | 38,186.00                         |
| 53 | 1,165.00         |          |             |          | 1,165.00                  | 20,272.00                         |
| 54 | 487.00           |          |             |          | 487.00                    | 10,498.00                         |
| 55 | 115,636.04       | 3,623.11 |             |          | 118,051.81                | 3,452,400.00                      |
| 65 | 900.00           |          |             |          | 900.00                    | 55,946.00                         |
| 66 | 4,888.00         |          |             |          | 4,888.00                  | 265,246.00                        |
| 67 | 878.00           |          |             |          | 878.00                    | 23,889.00                         |
| 68 | 10,297.00        | 397.70   |             |          | 10,412.00                 | 439,917.00                        |
| 71 | 20,590.00        | 948.00   |             |          | 21,223.00                 | 1,050,100.00                      |
| 72 | 114,354.00       | 788.00   |             |          | 115,142.00                | 4,190,128.00                      |
| 73 | 10,982.50        |          |             | 129.75   | 11,019.00                 | 327,555.00                        |
| 76 | 15,450.00        |          |             | 80.00    | 15,490.00                 | 586,546.00                        |
| 77 | 30,242.00        |          |             |          | 30,617.90                 | 935,555.00                        |
| 78 | 144,408.75       | 563.85   |             |          | 144,408.75                | 4,273,296.00                      |
| 80 | 5,862.00         |          |             |          | 5,862.00                  | 279,629.00                        |
| 1  |                  |          |             |          |                           | 70.00                             |
| 5  |                  |          |             |          |                           | 76.00                             |
| 9  |                  |          |             |          |                           | 70.39                             |
| 12 |                  |          |             |          |                           | 73.30                             |
| 14 |                  |          |             |          |                           | 55.00                             |
| 17 |                  |          |             |          |                           | 64.57                             |
| 21 |                  |          |             |          |                           | 64.97                             |
| 24 |                  |          |             |          |                           |                                   |
| 25 |                  |          |             |          |                           |                                   |
| 29 |                  |          |             |          |                           | 74.00                             |
| 36 |                  |          |             |          |                           | 52.70                             |
| 38 |                  |          |             |          |                           | 82.80                             |
| 39 |                  |          |             |          |                           | 60.00                             |
| 42 |                  |          |             |          |                           | 72.10                             |
| 43 |                  |          |             |          |                           | 60.00                             |
| 48 |                  |          |             |          |                           | 57.91                             |
| 51 |                  |          |             |          |                           | 38.07                             |
| 53 |                  |          |             |          |                           | 115.00                            |
| 54 |                  |          |             |          |                           | 94.00                             |
| 55 |                  |          |             |          |                           | 59.74                             |
| 65 |                  |          |             |          |                           | 34.00                             |
| 66 |                  |          |             |          |                           | 37.00                             |
| 67 |                  |          |             |          |                           | 73.50                             |
| 68 |                  |          |             |          |                           | 47.34                             |
| 71 |                  |          |             |          |                           | 39.00                             |
| 72 |                  |          |             |          |                           | 54.95                             |
| 73 |                  |          |             |          |                           | 66.75                             |
| 76 |                  |          |             |          |                           | 53.00                             |
| 77 |                  |          |             |          |                           | 65.45                             |
| 78 |                  |          |             |          |                           | 67.50                             |
| 80 |                  |          |             |          |                           | 42.00                             |

Table XIV.—Continued.

| NAME OF COMPANY.                                      | PASSENGER.   |             |           |                           |               |                                   |
|---|--------------|-------------|-----------|---------------------------|---------------|-----------------------------------|
|   | 1            | 2           | 3         | 4                         | 5             | 6                                 |
|   | PASSENGER.   |             |           |                           |               |                                   |
|   | COAL—TONS.   | WOOD—CORDS. |           | Total fuel consumed—tons. | Miles run.    | Average pounds consumed per mile. |
|   | Bituminous.  | Hard.       | Soft.     |                           |               |                                   |
| 83 New York, Chicago & St. Louis .....                | 12,676.50    |             | 174.03    | 12,763.50                 | 468,956.00    | 54.40                             |
| 85 Ohio & Mississippi .....                           | 10,653.00    | 135.00      |           | 10,743.00                 | 1,677,836.00  | 85                                |
| 86 Ohio, Indiana & Western .....                      | 76,803.00    | 2,167.63    |           | 78,248.00                 | 376,623.00    | 86                                |
| 88 Pennsylvania Co. (Op. P. Ft. W. & C.) .....        | 685.45       | 17.63       |           | 698.05                    | 2,633,730.00  | 88                                |
| 88 Pennsylvania Co. (Op. South Chi. & Southern) ..... | 6,196.00     | 72.00       | 145.00    | 6,413.00                  | 27,753.00     | 50.34                             |
| 93 Peoria, Decatur & Evansville .....                 | 2,304.00     | 24.00       |           | 2,352.00                  | 331,879.00    | 30.00                             |
| 94 Quincy, Omaha & Kansas City .....                  | 3,312.00     | 50.00       |           | 3,358.75                  | 86,156.00     | 93                                |
| 95 Rock Island & Peoria .....                         | 7,987.00     |             | 221.00    | 8,429.00                  | 126,372.00    | 54.00                             |
| 98 St. Louis, Alton & Terre Haute .....               | 2,098.00     |             |           | 2,098.00                  | 309,445.00    | 94                                |
| 105 St. Louis & Chicago .....                         | 20,408.00    | 720.00      |           | 20,888.00                 | 625,779.00    | 98                                |
| 108 Terre Haute & Indianapolis .....                  | 4,617.00     | 55.00       |           | 4,672.00                  | 209,873.00    | 105                               |
| 110 Terre Haute & Peoria .....                        | 7,416.00     |             | 348.00    | 7,590.00                  | 318,894.00    | 108                               |
| 111 Toledo, Peoria & Western .....                    | 11,188.00    |             |           | 11,188.00                 | 447,511.00    | 110                               |
| 112 Toledo, St. Louis & Kansas City .....             | 126,336.00   |             |           | 121,627.00                | 4,561,862.00  | 112                               |
| 114 Wabash .....                                      | 891.76       | 3,231.00    |           | 891.76                    | 47,962.00     | 56.80                             |
| 115 Wabash, Chester & Western .....                   | 50,949.25    | 1,918.37    |           | 52,228.25                 | 1,608,628.00  | 114                               |
| 116 Wisconsin Central Lines .....                     |              |             |           |                           |               | 37.23                             |
| Totals .....  | 1,936,123.30 | 26,478.79   | 16,153.78 | 1,965,426.19              | 60,358,359.00 | 65.00                             |

(1) East of Missouri River.

TABLE XIV.—Consumption of Fuel by Locomotives, Whole Line, for year ending June 30, 1890.—Continued.

| NAME OF COMPANY.                                      |            |           |             |       |                           |               |                                   |  |  |  |  |  |
|---|------------|-----------|-------------|-------|---------------------------|---------------|-----------------------------------|--|--|--|--|--|
| FREIGHT.  |            |           |             |       |                           |               |                                   |  |  |  |  |  |
| COAL—TONS.  |            |           | WOOD—CORDS. |       | Total fuel consumed—tons. | Miles run.    | Average pounds consumed per mile. |  |  |  |  |  |
| Bituminous.   | Hard.      | Soft.     |             |       |                           |               |                                   |  |  |  |  |  |
| 7   | 8          | 9         | 10          | 11    | 12                        |               |                                   |  |  |  |  |  |
| 1 Atchison, Topeka & Santa Fe.....                    | 112,071.00 | 1,970.00  | .....       | ..... | 113,384.00                | 2,289,515.00  | 1                                 |  |  |  |  |  |
| 5 Baltimore & Ohio.....                               | 98,820.00  | .....     | 757.00      | ..... | 99,199.00                 | 1,506,511.00  | 5                                 |  |  |  |  |  |
| 8 Centralia & Chester.....                            | 480.00     | .....     | .....       | ..... | 480.00                    | 19,957.00     | 8                                 |  |  |  |  |  |
| 9 Chicago & Alton.....                                | 166,333.00 | 3,192.00  | .....       | ..... | 168,461.00                | 3,583,214.00  | 9                                 |  |  |  |  |  |
| 12 Chicago & Atlantic.....                            | 78,821.00  | 699.00    | .....       | ..... | 79,190.00                 | 1,463,999.00  | 12                                |  |  |  |  |  |
| 14 Chicago & Eastern Illinois.....                    | 62,937.00  | 773.00    | .....       | ..... | 63,452.00                 | 1,222,706.00  | 14                                |  |  |  |  |  |
| 17 Chicago & Grand Trunk.....                         | 117,051.00 | .....     | .....       | ..... | 117,056.00                | 2,518,282.00  | 17                                |  |  |  |  |  |
| 21 Chicago & Northwestern.....                        | 665,020.00 | 8,211.00  | 12,290.00   | ..... | 676,611.00                | 14,731,227.00 | 21                                |  |  |  |  |  |
| 23 Chicago & Ohio River.....                          | 1,700.00   | 23.00     | .....       | ..... | 1,776.00                  | 85,827.00     | 23                                |  |  |  |  |  |
| 24 Chicago, Burlington & Northern.....                | .....      | .....     | .....       | ..... | .....                     | 853,097.00    | 24                                |  |  |  |  |  |
| 25 Chicago, Burlington & Quincy (I).....              | 520,608.75 | 6,203.00  | .....       | ..... | 524,784.06                | .....         | 25                                |  |  |  |  |  |
| 26 Chicago, Milwaukee & St. Paul.....                 | 487,868.00 | .....     | 15,230.00   | ..... | 495,483.00                | 13,357,593.00 | 26                                |  |  |  |  |  |
| 30 Chicago, St. Louis & Pittsburgh.....               | 114,467.00 | 1,829.00  | .....       | ..... | 115,680.00                | 3,403,294.00  | 30                                |  |  |  |  |  |
| 36 Chicago, St. Paul & Kansas City.....               | 161,147.75 | 2,371.43  | .....       | ..... | 165,890.00                | 3,473,316.00  | 36                                |  |  |  |  |  |
| 38 Cleveland, Cincinnati, Chicago & St. Louis.....    | 255,921.25 | .....     | .....       | ..... | 256,921.25                | 5,493,676.00  | 38                                |  |  |  |  |  |
| 42 Kankakee & Seneca.....                             | 973.00     | 19.00     | .....       | ..... | 985.00                    | 26,039.00     | 42                                |  |  |  |  |  |
| 43 Peoria & Eastern.....                              | 16,415.50  | .....     | .....       | ..... | 16,415.50                 | 351,139.00    | 43                                |  |  |  |  |  |
| 48 Elgin, Joliet & Eastern.....                       | 12,733.00  | 290.00    | .....       | ..... | 12,926.00                 | 284,397.00    | 48                                |  |  |  |  |  |
| 51 Fulton County Narrow Gauge.....                    | 1,247.00   | 48.00     | .....       | ..... | 1,279.00                  | 38,186.00     | 51                                |  |  |  |  |  |
| 53 Grand Tower & Carbondale.....                      | 2,163.00   | .....     | .....       | ..... | 2,163.00                  | 36,540.00     | 53                                |  |  |  |  |  |
| 54 Grand Tower & Cape Girardeau.....                  | (1) 732.00 | .....     | .....       | ..... | 732.00                    | .....         | 54                                |  |  |  |  |  |
| 55 Illinois Central.....                              | 368,946.52 | 10,438.12 | .....       | ..... | 376,259.62                | 7,931,397.00  | 55                                |  |  |  |  |  |
| 56 Indiana & Illinois Southern.....                   | 2,908.00   | .....     | .....       | ..... | 2,908.00                  | 55,069.00     | 56                                |  |  |  |  |  |
| 60 Indianapolis, Decatur & Western.....               | 7,456.00   | .....     | .....       | ..... | 7,456.00                  | 167,473.00    | 60                                |  |  |  |  |  |
| 67 Indiana, Illinois & Iowa.....                      | 7,856.00   | .....     | .....       | ..... | 7,856.00                  | 201,332.00    | 67                                |  |  |  |  |  |
| 68 Iowa Central.....                                  | 49,614.50  | 1,110.50  | .....       | ..... | 50,485.00                 | 1,175,835.00  | 68                                |  |  |  |  |  |
| 71 Lake Erie & Western.....                           | 61,267.00  | 1,290.00  | .....       | ..... | 62,107.00                 | 1,292,293.00  | 71                                |  |  |  |  |  |
| 72 Lake Shore & Michigan Southern.....                | 393,601.00 | 1,488.00  | .....       | ..... | 395,089.00                | 9,266,196.00  | 72                                |  |  |  |  |  |
| 74 Louisville & Nashville.....                        | 25,889.50  | .....     | 246.25      | ..... | 26,053.66                 | 560,441.00    | 74                                |  |  |  |  |  |
| 76 Louisville, Evansville & St. L., Consolidated..... | 27,799.00  | .....     | 129.00      | ..... | 27,803.73                 | 850,586.00    | 76                                |  |  |  |  |  |
| 77 Louisville, New Albany & Chicago.....              | 69,980.00  | 1,235.60  | .....       | ..... | 70,803.73                 | 1,349,473.00  | 77                                |  |  |  |  |  |
| 78 Michigan Central.....                              | 315,507.75 | .....     | .....       | ..... | 315,507.75                | 6,836,655.00  | 78                                |  |  |  |  |  |
| 80 Mobile & Ohio.....                                 | 22,638.00  | .....     | .....       | ..... | 22,638.00                 | 471,180.00    | 80                                |  |  |  |  |  |



Table XIV.—Continued.

| NAME OF COMPANY.                                     | 7            | 8         | 9           | 10       | 11                        | 12             |                                   |
|--|--------------|-----------|-------------|----------|---------------------------|----------------|-----------------------------------|
|  | FREIGHT.     |           |             |          |                           |                |                                   |
|  | COAL—Tons.   |           | WOOD—CORDS. |          | Total fuel consumed—tons. | Miles run.     | Average pounds consumed per mile. |
|  | Bituminous.  |           | Hard.       | Soft.    |                           |                |                                   |
| 83 New York, Chicago & St. Louis.....                | 297,853.10   | .....     | .....       | 1,506.04 | 298,606.10                | 4,058,343.00   | 102.80                            |
| 85 Ohio & Mississippi.....                           | .....        | .....     | .....       | .....    | .....                     | 1,977,181.00   | .....                             |
| 86 Ohio, Indiana & Western.....                      | 20,492.00    | 178.00    | .....       | .....    | 21,111.00                 | 325,976.00     | 120.00                            |
| 88 Pennsylvania Co. (Operating P., Ft. W. & C.)..... | 238,654.00   | 4,349.67  | .....       | .....    | 211,564.00                | 4,371,532.00   | 110.52                            |
| 88 Pennsylvania Co. (Op. S. Chicago & Southern)..... | 611.10       | 9.63      | .....       | .....    | 617.50                    | 8,589.00       | 138.94                            |
| 92 Peoria & Pekin Union.....                         | (4) 739.00   | .....     | .....       | .....    | 739.00                    | 36,500.00      | 40.00                             |
| 93 Peoria, Decatur & Evansville.....                 | 14,077.00    | 81.00     | .....       | 161.00   | 14,319.00                 | 324,482.00     | 88.00                             |
| 94 Quincy, Omaha & Kansas City.....                  | 4,762.00     | 42.00     | .....       | .....    | 4,832.00                  | 112,696.00     | 88.00                             |
| 95 Rock Island & Peoria.....                         | 12,637.00    | 145.00    | .....       | .....    | 13,014.00                 | 236,708.00     | 110.42                            |
| 98 St. Louis, Alton & Terre Haute.....               | 23,414.00    | .....     | .....       | 361.00   | 24,166.00                 | 500,382.00     | 96.00                             |
| 105 St. Louis & Chicago.....                         | 1,371.00     | .....     | .....       | .....    | 1,371.00                  | 28,170.00      | 93.78                             |
| 106 St. Louis & Peoria.....                          | 905.00       | .....     | .....       | .....    | 905.00                    | 6,776.00       | 179.00                            |
| 108 Terre Haute & Indianapolis.....                  | 40,740.00    | 1,613.00  | .....       | .....    | 41,835.00                 | 876,584.00     | 95.30                             |
| 110 Terre Haute & Peoria.....                        | 8,691.00     | 125.00    | .....       | .....    | 8,824.00                  | 141,103.00     | 123.30                            |
| 111 Toledo, Peoria & Western.....                    | 23,367.00    | .....     | .....       | 657.00   | 23,696.00                 | 377,296.00     | 82.00                             |
| 112 Toledo, St. Louis & Kansas City.....             | 68,193.00    | .....     | .....       | .....    | 68,193.00                 | 1,227,408.00   | 111.00                            |
| 114 Wabash.....                                      | 352,123.00   | 8,227.00  | .....       | .....    | 360,350.00                | 7,735,077.00   | 93.20                             |
| 115 Wabash, Chester & Western.....                   | 855.50       | .....     | .....       | .....    | 855.50                    | 32,526.00      | 52.23                             |
| 116 Wisconsin Central Lines.....                     | 96,737.50    | 2,834.37  | .....       | .....    | 98,627.50                 | 2,385,358.10   | 82.00                             |
| Totals .....   | 5,316,928.78 | 59,346.32 | 31,244.29   | .....    | 5,380,393.25              | 109,485,306.00 | .....                             |

(1) Includes fuel consumed by switching and construction locomotives.

(2) Includes miles run by switching and construction locomotives.

(3) East of Missouri River.

(4) Includes fuel consumed by locomotives in mixed trains.

Table XIV.—Continued.

| NAME OF COMPANY.                                   | SWITCHING.  |             |             |          |                           |              |                                       |
|--|-------------|-------------|-------------|----------|---------------------------|--------------|---------------------------------------|
|  | 13          | 14          | 15          | 16       | 17                        | 18           | 19                                    |
|  | COAL—TONS.  |             | WOOD—CORDS. |          | Total fuel consumed—tons. | Miles run.   | Average pounds consumed per ton-mile. |
|  | Anthracite. | Bituminous. | Hard.       | Soft.    |                           |              |                                       |
| 1 Atchison, Topeka & Santa Fe.....                 | .....       | 19,336.00   | 493.00      | .....    | 19,665.00                 | 788,697.00   | 50.00                                 |
| 5 Baltimore & Ohio.....                            | .....       | 16,461.00   | .....       | .....    | 16,461.00                 | 397,739.00   | 83.00                                 |
| 7 Balt. Railway of Chicago.....                    | .....       | 32,380.00   | .....       | .....    | 32,685.00                 | 971,179.00   | 67.00                                 |
| 9 Chicago & Alton.....                             | .....       | 34,729.00   | 1,237.00    | 174.00   | 35,554.00                 | 1,389,576.00 | 51.17                                 |
| 11 Chicago & Atlantic.....                         | .....       | 10,516.00   | .....       | .....    | 10,516.00                 | 538,582.00   | 39.10                                 |
| 13 Chicago & Eastern Illinois.....                 | .....       | 20,120.00   | 236.00      | .....    | 20,317.00                 | 472,938.00   | 102.90                                |
| 15 Chicago & Grand Trunk.....                      | .....       | 17,457.00   | .....       | .....    | 17,457.00                 | 968,217.00   | 36.08                                 |
| 21 Chicago & Northwestern.....                     | .....       | 174,510.00  | 1,831.00    | 2,688.00 | 177,118.00                | 6,403,391.00 | 55.32                                 |
| 23 Chicago, Wilmington & Quincy.....               | .....       | 193,722.50  | 1,020.00    | .....    | 194,402.50                | .....        | .....                                 |
| 25 Chicago, Milwaukee & St. Paul.....              | .....       | 165,875.00  | .....       | 5,178.00 | 168,463.00                | 4,500,181.00 | 74.00                                 |
| 30 Chicago, St. Louis & Pittsburgh.....            | .....       | 47,305.00   | 570.00      | .....    | 47,932.00                 | 1,435,913.00 | 66.78                                 |
| 35 Chicago, St. Paul & Kansas City.....            | .....       | 16,650.50   | 317.87      | .....    | 16,746.50                 | 430,206.00   | 77.80                                 |
| 38 Cleveland, Cincinnati, Chicago & St. Louis..... | .....       | 71,004.75   | .....       | .....    | 71,004.75                 | 3,019,168.00 | 47.00                                 |
| 42 Kankakee & Seneca.....                          | .....       | 635.00      | .....       | .....    | 635.00                    | 6,823.00     | 102.70                                |
| 43 East St. Louis & Carondelet.....                | .....       | 2,735.00    | 132.00      | .....    | 2,863.00                  | 104,462.00   | 54.00                                 |
| 45 Elgin, Joliet & Eastern.....                    | .....       | 2,512.00    | 61.00       | .....    | 2,583.00                  | 81,716.00    | 53.21                                 |
| 53 Illinois Central.....                           | 1,581.00    | 46,389.72   | 3,038.03    | .....    | 49,996.18                 | 2,557,538.00 | 39.10                                 |
| 60 Indianapolis, Decatur & Western.....            | .....       | 2,019.00    | .....       | .....    | 2,019.00                  | 77,543.00    | 52.00                                 |
| 67 Indiana, Illinois & Iowa.....                   | .....       | 4,514.00    | .....       | .....    | 4,514.00                  | 162,321.00   | 55.96                                 |
| 68 Iowa Central.....                               | .....       | 5,206.50    | 81.20       | .....    | 5,322.00                  | 223,203.00   | 47.68                                 |
| 71 Lake Erie & Western.....                        | .....       | 13,588.00   | 489.00      | .....    | 13,914.00                 | 543,530.00   | 50.00                                 |
| 72 Lake Shore & Michigan Southern.....             | .....       | 64,738.00   | 383.00      | .....    | 65,121.00                 | 4,438,128.00 | 29.34                                 |
| 74 Louisville & Nashville.....                     | .....       | 8,176.00    | .....       | 75.00    | 8,226.00                  | 350,252.00   | 46.69                                 |
| 76 Louisville, Evansville & St. Louis, Consol..... | .....       | 3,474.00    | .....       | 36.00    | 3,492.00                  | 166,100.00   | 42.00                                 |
| 77 Louisville, New Albany & Chicago.....           | .....       | 12,220.00   | 231.00      | .....    | 12,374.00                 | 415,510.00   | 59.56                                 |
| 78 Michigan Central.....                           | .....       | 54,549.50   | .....       | .....    | 54,549.50                 | 3,714,512.00 | 26.70                                 |
| 80 Mobile & Ohio.....                              | .....       | 4,312.00    | .....       | .....    | 4,312.00                  | 206,838.00   | 42.00                                 |
| 83 New York, Chicago & St. Louis.....              | .....       | 28,334.70   | .....       | 449.01   | 28,559.20                 | 1,210,026.00 | 48.00                                 |
| 85 Ohio & Mississippi.....                         | .....       | .....       | .....       | .....    | .....                     | 904,625.00   | .....                                 |

Table XIV.—Continued.

| NAME OF COMPANY.                                     | 13          | 14           | 15          | 16       | 17                        | 18               | 19                                |
|--|-------------|--------------|-------------|----------|---------------------------|------------------|-----------------------------------|
|  | SWITCHING.  |              |             |          |                           |                  |                                   |
|  | COAL—Tons.  |              | WOOD—Cords. |          | Total fuel consumed—tons. | Miles run.       | Average pounds consumed per mile. |
|  | Anthracite. | Bituminous.  | Hard.       | Soft.    |                           |                  |                                   |
| 86 Ohio, Indiana & Western .....                     | .....       | 4,020.00     | 98.00       | .....    | 4,085.00                  | 232,200.00       | 35.00                             |
| 88 Pennsylvania Co. (Op. Pitts., Ft. W. & Chi.)...   | .....       | 63,670.04    | 1,230.00    | .....    | 64,490.04                 | 2,527,015.00     | 51.04                             |
| 92 Peoria & Pekin Union .....                        | .....       | 9,770.00     | .....       | .....    | 9,770.00                  | 488,500.00       | 40.00                             |
| 93 Peoria, Decatur & Evansville .....                | .....       | 1,132.00     | .....       | .....    | 1,132.00                  | 107,952.00       | 21.00                             |
| 94 Quincy, Omaha & Kansas City .....                 | .....       | 1,000.00     | 22.00       | .....    | 1,036.00                  | 15,700.00        | 81.00                             |
| 95 Rock Island & Peoria .....                        | .....       | 1,420.00     | 15.00       | .....    | 1,634.00                  | 71,748.00        | 39.97                             |
| 96 St. Louis, Alton & Terre Haute .....              | .....       | 3,357.00     | .....       | 116.00   | 3,789.00                  | 151,103.00       | 50.00                             |
| 107 Terminal Railroad Association of St. Louis ..... | .....       | 28,237.00    | 475.00      | .....    | 28,653.00                 | .....            | 107                               |
| 108 Terre Haute & Indianapolis .....                 | .....       | 4,948.00     | 290.00      | .....    | 5,141.00                  | 21,008.00        | 100.55                            |
| 110 Terre Haute & Peoria .....                       | .....       | 1,057.00     | 15.00       | .....    | 1,072.00                  | 23,491.00        | 39.61                             |
| 111 Toledo, Peoria & Western .....                   | .....       | 567.00       | .....       | 34.00    | 584.00                    | 514,139.00       | 58.00                             |
| 112 Toledo, St. Louis & Kansas City .....            | .....       | 9,913.00     | .....       | .....    | 9,913.00                  | (1) 2,802,904.00 | 50.30                             |
| 114 Wabash .....                                     | .....       | 68,802.00    | 1,646.00    | .....    | 70,448.00                 | 526,632.00       | 45.00                             |
| 116 Wisconsin Central Lines .....                    | .....       | 11,547.00    | 578.87      | .....    | 11,953.00                 | .....            | .....                             |
| Totals .....   | 1,581.00    | 1,187,110.31 | 14,702.97   | 8,750.04 | 1,204,482.77              | 44,274,728.00    | .....                             |

(1) Includes fuel used by construction locomotives.

Table XIV.—Continued.

| NAME OF COMPANY. |   | 20            | 21     | 22          | 23        | 24                        | 25         |                                   |
|------------------|---|---------------|--------|-------------|-----------|---------------------------|------------|-----------------------------------|
|                  |   | CONSTRUCTION. |        |             |           |                           |            |                                   |
|                  |   | COAL—Tons.    |        | WOOD—Cords. |           | Total fuel consumed—tons. | Miles run. | Average pounds consumed per mile. |
|                  |   | Bituminous.   |        | Hard.       | Soft.     |                           |            |                                   |
| 1                | Atchison, Topeka & Santa Fe.....                      | 7,244.00      | 93.00  |             | 7,306.00  | 206,924.00                | 49.00      |                                   |
| 9                | Chicago & Alton.....                                  | 5,194.00      | 161.12 |             | 5,301.00  | 181,491.00                | 58.42      |                                   |
| 12               | Chicago & Atlantic.....                               | 4,346.00      |        |             | 4,346.00  | 156,780.00                | 55.40      |                                   |
| 14               | Chicago & Eastern Illinois.....                       | 2,535.00      | 26.00  |             | 2,553.00  | 45,792.00                 | 102.80     |                                   |
| 17               | Chicago & Grand Trunk.....                            | 2,812.15      |        |             | 2,812.15  | 43,511.00                 | 60.16      |                                   |
| 21               | Chicago & Northwestern.....                           | 21,249.00     | 420.00 | 594.00      | 21,836.00 | 811,160.00                | 53.81      |                                   |
| 24               | Chicago, Burlington & Northern.....                   | 8,090.00      | 115.00 |             | 8,136.64  | 22,812.00                 |            |                                   |
| 25               | Chicago, Burlington & Quincy.....                     | 20,272.00     |        | 94.00       | 20,729.00 | 794,277.00                | 74.00      |                                   |
| 29               | Chicago, Milwaukee & St. Paul.....                    | 3,976.00      | 80.00  |             | 4,029.00  | 171,183.00                | 47.06      |                                   |
| 36               | Chicago, St. Louis & Pittsburgh.....                  | 4,038.50      | 73.56  |             | 4,185.60  | 79,694.00                 | 105.04     |                                   |
| 38               | Chicago, St. Paul & Kansas City.....                  | 6,777.00      |        |             | 6,777.00  | 234,219.00                | 57.80      |                                   |
| 39               | Cleveland, Cincinnati, Chicago & St. Louis.....       | 5.00          |        |             | 5.00      | 300.00                    | 36.70      |                                   |
| 42               | Kankakee & Seneca.....                                | 44.50         |        |             | 44.50     | 1,530.00                  | 57.80      |                                   |
| 43               | Peoria & Eastern.....                                 | 3,016.00      | 53.00  |             | 3,051.00  | 45,969.00                 | 132.93     |                                   |
| 48               | Elgin, Joliet & Eastern.....                          | 7,883.77      | 667.02 |             | 8,328.51  | 490,360.00                | 33.97      |                                   |
| 55               | Illinois Central.....                                 | 222.00        |        |             | 222.00    | 5,488.00                  | 81.00      |                                   |
| 66               | Indianapolis, Decatur & Western.....                  | 208.00        |        |             | 208.00    | 7,863.00                  | 52.90      |                                   |
| 67               | Indiana, Illinois & Iowa.....                         | 3,119.00      | 140.00 |             | 3,212.33  | 104,360.00                | 60.00      |                                   |
| 71               | Lake Erie & Western.....                              | 13,349.00     | 47.00  |             | 13,396.00 | 632,315.00                | 38.69      |                                   |
| 72               | Lake Shore & Michigan Southern.....                   | 2,130.00      |        | 14.00       | 2,139.00  | 66,123.00                 | 61.44      |                                   |
| 74               | Louisville & Nashville.....                           | 2,166.00      |        | 11.00       | 2,173.00  | 83,266.00                 | 52.00      |                                   |
| 76               | Louisville, Evansville & St. Louis, Consolidat'd..... | 1,392.00      | 55.75  |             | 1,427.16  | 55,680.00                 | 51.33      |                                   |
| 77               | Louisville, New Albany & Chicago.....                 |               |        |             | (1)       | 573,363.00                | 77         |                                   |
| 78               | Michigan Central.....                                 | 1,503.00      |        |             | 1,503.00  | 63,493.00                 | 46.00      |                                   |
| 80               | Mobile & Ohio.....                                    | 8,763.30      |        | 80.00       | 8,803.30  | 215,825.00                | 81.60      |                                   |
| 83               | New York, Chicago & St. Louis.....                    |               |        |             |           | 131,663.00                | 83         |                                   |
| 85               | Ohio & Mississippi.....                               |               |        |             |           | 29,957.00                 | 43.00      |                                   |
| 86               | Ohio, Indiana & Western.....                          | 575.00        | 18.00  |             | 587.00    | 317,132.00                | 41.51      |                                   |
| 88               | Pennsylvania Co. (Op. Pitts., Ft. Wayne & Chi.....    | 6,372.50      | 315.25 |             | 6,582.50  | 5,338.00                  | 37.61      |                                   |
| 89               | Pennsylvania Co. (Op. South Chi. & Southern.....      | 98.40         | 4.00   |             | 100.03    | 16,586.00                 | 78.00      |                                   |
| 93               | Peoria, Decatur & Evansville.....                     | 638.00        |        | 11.00       | 649.00    |                           |            |                                   |

Table XIV.—Continued.

| NAME OF COMPANY.                         | 20            |  |  |  |       | 21          |  |  |  |       | 22                        |        |  |  |  | 23         |            |  |  |  | 24                                |              |  |  |  | 25 |        |       |  |  |
|--|---------------|--|--|--|-------|-------------|--|--|--|-------|---------------------------|--------|--|--|--|------------|------------|--|--|--|-----------------------------------|--------------|--|--|--|----|--------|-------|--|--|
|  | CONSTRUCTION. |  |  |  |       |             |  |  |  |       |                           |        |  |  |  |            |            |  |  |  |                                   |              |  |  |  |    |        |       |  |  |
|  | COAL—Tons.    |  |  |  |       | WOOD—Cords. |  |  |  |       | Total fuel consumed—tons. |        |  |  |  | Miles run. |            |  |  |  | Average pounds consumed per mile. |              |  |  |  |    |        |       |  |  |
|  |               |  |  |  |       |             |  |  |  |       |                           |        |  |  |  |            |            |  |  |  |                                   |              |  |  |  |    |        |       |  |  |
| Bituminous.                              |               |  |  |  | Hard. |             |  |  |  | Soft. |                           |        |  |  |  |            |            |  |  |  |                                   |              |  |  |  |    |        |       |  |  |
| 94 Quincy, Omaha, & Kansas City.....     | 540.00        |  |  |  |       | 540.00      |  |  |  |       |                           | 540.00 |  |  |  |            | 540.00     |  |  |  |                                   | 4,320.00     |  |  |  |    | 250.00 | 94    |  |  |
| 95 Rock Island & Peoria.....             | 460.00        |  |  |  |       | 460.00      |  |  |  |       | 6.00                      |        |  |  |  |            | 465.61     |  |  |  |                                   | 13,893.00    |  |  |  |    | 67.02  | 95    |  |  |
| 98 St. Louis, Alton & Terre Haute.....   | 672.00        |  |  |  |       | 672.00      |  |  |  |       | 24.00                     |        |  |  |  |            | 720.00     |  |  |  |                                   | 31,931.00    |  |  |  |    | 45.00  | 98    |  |  |
| 108 Terre Haute & Indianapolis.....      | 1,029.00      |  |  |  |       | 1,029.00    |  |  |  |       | 59.00                     |        |  |  |  |            | 1,069.00   |  |  |  |                                   | 48,452.00    |  |  |  |    | 44.10  | 108   |  |  |
| 111 Toledo, Peoria & Western.....        | 178.00        |  |  |  |       | 178.00      |  |  |  |       |                           |        |  |  |  |            | 181.00     |  |  |  |                                   | 8,385.00     |  |  |  |    | 43.17  | 111   |  |  |
| 112 Toledo, St. Louis & Kansas City..... | 11,727.00     |  |  |  |       | 11,727.00   |  |  |  |       |                           |        |  |  |  |            | 11,727.00  |  |  |  |                                   | 351,822.00   |  |  |  |    | 67.00  | 112   |  |  |
| 116 Wisconsin Central Lines.....         | 4,832.50      |  |  |  |       | 4,832.50    |  |  |  |       | 326.00                    |        |  |  |  |            | 5,069.50   |  |  |  |                                   | 261,730.00   |  |  |  |    | 39.00  | 116   |  |  |
| Totals.....                              | 166,277.62    |  |  |  |       | 166,277.62  |  |  |  |       | 2,659.70                  |        |  |  |  |            | 169,006.83 |  |  |  |                                   | 6,513,933.00 |  |  |  |    | .....  | ..... |  |  |

(1). Fuel included in that used in freight service.



Table XIV.—Continued.

| NAME OF COMPANY.   | 26                               | 27                         | 28                                   | 29   | 30  |    |
|--|----------------------------------|----------------------------|--------------------------------------|--|---|----|
|  | Grand total fuel consumed.—Tons. | Grand total miles run..... | Average pounds consumed per mile.... | Average cost coal per ton at distributing point..... | Average cost wood per cord at distributing point..... |    |
| 1 Atchison, Topeka & Santa Fe .....                            | 179,896.00                       | 4,366,959.00               | 82.00                                | \$2 75   | \$1 61  | 1  |
| 5 Baltimore & Ohio .....                                       | 158,091.00                       | 3,019,723.00               | 105.00                               | 1 56   | 1 03  | 5  |
| 7 Belt Railway of Chicago .....                                | 32,685.00                        | 971,179.00                 | 67.00                                | 1 85   | 3 25  | 7  |
| 8 Centralia & Chester .....                                    | 480.00                           | 19,957.00                  | 48.00                                | .....  | .....   | 8  |
| 9 Chicago & Alton .....  | 285,492.00                       | 7,318,616.00               | 78.02                                | 1 80   | 4 00  | 9  |
| 12 Chicago & Atlantic .....                                    | 124,348.00                       | 2,977,898.00               | 83.51                                | 1 69   | 1 09  | 12 |
| 14 Chicago & Eastern Illinois .....                            | 111,705.00                       | 2,526,673.00               | 88.40                                | 1 11   | 2 18  | 14 |
| 17 Chicago & Grand Trunk .....                                 | 179,190.10                       | 4,906,454.00               | 73.04                                | 2 05   | .....   | 17 |
| 21 Chicago & Northwestern .....                                | 1,099,064.00                     | 28,826,000.00              | 76.25                                | 1 83   | 2 61  | 21 |
| 23 Chicago & Ohio River .....                                  | 1,776.00                         | 85,827.00                  | 41.39                                | 1 15   | 1 30  | 23 |
| 24 Chicago, Burlington & Northern....                          | (1)61,986.00                     | 1,495,052.00               | 83.00                                | 2 52   | 1 75  | 24 |
| 25 Chicago, Burlington & Quincy .....                          | 757,784.30                       | (2)13,391,531.00           | (4)97.85                             | 1 98   | 2 59  | 25 |
| 29 Chicago, Milwaukee & St. Paul .....                         | 990,966.00                       | 26,682,178.00              | 74.00                                | 1 98   | 2 48  | 29 |
| 34 Chicago, Rock Island & Pacific .....                        | (3)589,951.00                    | 18,927,423.00              | 62.34                                | .....  | .....   | 34 |
| 36 Chicago, St. Louis & Pittsburgh .....                       | (2)235,581.00                    | 7,208,212.00               | 62.56                                | 1 80   | 3 00  | 36 |
| 38 Chicago, St. Paul & Kansas City .....                       | 212,760.49                       | 4,936,799.00               | 98.28                                | 1 80   | 2 75  | 38 |
| 39 Cleveland, Cin., Chicago & St. L. ....                      | (6)438,318.25                    | 12,174,082.00              | 71.00                                | (6)1 45  | 1 91  | 39 |
| 42     Kankakee & Seneca .....                                 | 2,457.00                         | 58,479.00                  | 83.60                                | 1 45   | 1 84  | 42 |
| 43     Peoria & Eastern .....                                  | (7)27,189.00                     | 703,659.00                 | 77.27                                | 1 45   | 2 00  | 43 |
| 45 East St. Louis & Carondelet .....                           | 2,823.00                         | 104,462.00                 | 54.00                                | 1 20   | 2 70  | 45 |
| 48 Elgin, Joliet & Eastern .....                               | 19,505.00                        | 444,653.00                 | 87.73                                | 1 43   | 2 75  | 48 |
| 51 Fulton County Narrow Gauge .....                            | 2,006.00                         | 76,372.00                  | 52.53                                | 1 02   | 2 00  | 51 |
| 53 Grand Tower & Carbondale .....                              | 3,328.00                         | 56,812.00                  | 117.00                               | 1 00   | .....   | 53 |
| 54     Grand Tower & Cape Girardeau .....                      | 1,219.00                         | 25,313.00                  | 92.00                                | 1 00   | .....   | 54 |
| 55 Illinois Central .....                                      | 552,615.55                       | 14,931,515.00              | 74.02                                | 1 06   | 2 29  | 55 |
| 65 Indiana & Illinois Southern .....                           | 3,808.00                         | 111,015.00                 | 90                                   | .....  | .....   | 65 |
| 66 Indianapolis, Decatur & Western .....                       | 14,585.00                        | 515,750.00                 | 56.00                                | 1 45   | .....   | 66 |
| 67 Indiana, Illinois & Iowa .....                              | 13,486.00                        | 395,405.00                 | 68.21                                | .....  | .....   | 67 |
| 68 Iowa Central .....  | 66,119.00                        | 1,838,955.00               | 71.91                                | 1 44   | 1 79  | 68 |
| 71 Lake Erie & Western .....                                   | 100,455.33                       | 2,990,283.00               | 65.90                                | 1 64   | 2 15  | 71 |
| 72 Lake Shore & Michigan Southern .....                        | 558,748.00                       | 18,586,767.00              | 60.12                                | 1 35   | .....   | 72 |
| 74 Louisville & Nashville .....                                | 47,437.66                        | 1,304,371.00               | 72.26                                | 1 00   | 1 92  | 74 |
| 76 Louisville, Evansville & St. Louis,<br>(Consolidated) ..... | 49,017.00                        | 1,686,498.00               | 58.06                                | 70   | 1 00  | 76 |
| 77 Louisville, New Albany & Chicago .....                      | 115,224.79                       | 2,756,218.00               | 83.61                                | 1 53   | 2 40  | 77 |
| 78 Michigan Central .....                                      | 514,466.00                       | 15,397,796.00              | 66.82                                | 2 11   | .....   | 78 |
| 80 Mobile & Ohio .....   | 34,315.00                        | 1,023,140.00               | 67.00                                | 97   | .....   | 80 |
| 83 New York, Chicago & St. Louis .....                         | 258,732.10                       | 5,953,150.00               | 86.90                                | 1 63   | 1 26  | 83 |
| 85 Ohio & Mississippi .....                                    | (4)178,589.00                    | 4,671,635.00               | 78.70                                | 91   | 91  | 85 |
| 86 Ohio, Indiana & Western .....                               | 36,526.00                        | 961,762.00                 | 72.00                                | 1 40   | 2 00  | 86 |
| 87 Peewee .....  | 197.00                           | 7,000.00                   | 56.28                                | .....  | .....   | 87 |
| 88 Penn. Co. (Op. P., Fr. W. & C.) .....                       | 390,884.75                       | 9,849,409.00               | 79.37                                | 1 33   | 2 52  | 90 |
| 88 Penn. Co. (Op. So. Chi. & Southern)                         | 1,415.95                         | 41,980.00                  | 67.43                                | 1 38   | 2 31  | 91 |
| 92 Peoria & Pekin Union .....                                  | 10,500.00                        | 525,000.00                 | 40.00                                | 1 08   | .....   | 92 |
| 93 Peoria, Decatur & Evansville .....                          | 22,513.00                        | 780,899.00                 | 57.00                                | 88   | 1 25  | 93 |
| 94 Quincy, Omaha & Kansas City .....                           | 8,360.00                         | 218,872.00                 | 76.00                                | 1 75   | 1 20  | 94 |
| 95 Rock Island & Peoria .....                                  | 18,272.36                        | 447,721.00                 | 81.62                                | 1 56   | 3 59  | 95 |
| 96 St. Louis, Alton & Springfield .....                        | 5,300.00                         | .....                      | .....                                | .....  | .....   | 96 |

(1) Cannot give amount of fuel consumed by the different classes of locomotives.

(2) Includes fuel consumed by Englewood Connecting R'y Co.

(3) Does not include mileage of switching and construction engines.

(4) Applies to passenger and freight locomotives only.

(5) Includes 1.65 cords of hard wood.

(6) Lump coal. Nut, \$1.16; slack, 45 cents.

(7) Includes 300 cords of hard wood.

\* Cost of anthracite coal, \$8.26 per ton.

Table XIV.—Continued.

|     | NAME OF COMPANY.                      | 26                                   | 27                         | 28                                  | 29  | 30  |     |
|-----|---------------------------------------|--------------------------------------|----------------------------|-------------------------------------|---|---|-----|
|     |                                       | Grand total fuel consumed.—Tons..... | Grand total miles run..... | Average pounds consumed per mile... | Average cost per ton at distributing point..... | Average cost wood per cord at distributing point..... |     |
| 98  | St. Louis, Alton & Terre Haute.....   | 37,104.00                            | 992,977.00                 | 74.73                               | 76  | .....   | 98  |
| 105 | St. Louis & Chicago .....             | 3,469.00                             | 90,783.00                  | 76.42                               | 1 00  | .....   | 105 |
| 106 | St. Louis & Peoria .....              | 605.00                               | 6,776.00                   | 179.00                              | 60  | .....   | 106 |
| 107 | Terminal Railroad Asso. of St. L..... | 28,653.00                            | (1).....                   | .....                               | 1 27  | 8 25  | 107 |
| 108 | Terre Haute & Indianapolis.....       | 68,953.00                            | 1,764,571.00               | 78.10                               | 1 03  | .....   | 108 |
| 110 | Terre Haute & Peoria.....             | 14,568.00                            | 372,044.00                 | 78.31                               | 1 55  | 2 00  | 110 |
| 111 | Toledo, Peoria & Western.....         | 32,051.00                            | 934,066.00                 | 68.63                               | 1 14  | .....   | 111 |
| 112 | Toledo, St. Louis & Kansas City...    | 101,021.00                           | 2,540,990.00               | 79.50                               | 1 00  | .....   | 112 |
| 114 | Wabash.....                           | 560,425.00                           | 15,093,843.00              | 74.20                               | 1 32  | 1 22  | 114 |
| 115 | Wabash, Chester & Western.....        | 1,747.32                             | 80,428.00                  | 43.43                               | 73  | .....   | 115 |
| 116 | Wisconsin Central Lines.....          | 167,858.25                           | 4,776,348.00               | 70.00                               | 2 30  | 2 15  | 116 |
|     | Totals .....                          | 9,556,663.14                         | 252,958,280.00             | 75.55                               |   |   |     |

(1) Cannot give miles run by switching locomotives.



Table XV.—Continued.

| NAME OF COMPANY.                                     | 1           | 2        | 3        | 4          | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12              |
|--|-------------|----------|----------|------------|----------|----------|----------|----------|----------|----------|----------|-----------------|
|  | PASSENGERS. |          |          | EMPLOYEES. |          |          | OTHERS.  |          |          | TOTAL.   |          |                 |
|  |             |          |          |            |          |          |          |          |          |          |          |                 |
|  | Killed..    | Injured. | Total... | Killed..   | Injured. | Total... | Killed.. | Injured. | Total... | Killed.. | Injured. | GRAND TOTALS... |
| 71 Lake Erie & Western .....                         | 1           |          | 1        | 1          | 10       | 11       | 3        | 7        | 3        | 4        | 11       | 15              |
| 72 Lake Shore & Michigan Southern .....              |             |          |          | 9          | 11       | 20       |          |          | 15       | 17       | 18       | 35              |
| 73 Louisville & Nashville .....                      | 1           |          |          | 2          | 26       | 28       |          | 5        | 12       | 10       | 32       | 42              |
| 74 Louisville, Evansville & St. Louis-Consolid ..... |             | 1        | 1        | 1          |          |          |          | 1        | 2        | 2        | 4        | 6               |
| 75 Louisville, New Albany & Chicago .....            |             |          |          |            | 1        | 1        |          | 2        | 3        | 3        | 4        | 6               |
| 76 Michigan Central .....                            |             |          |          |            | 15       | 16       |          | 3        | 7        | 5        | 18       | 23              |
| 77 Mobile & Ohio .....                               |             |          |          |            | 16       | 16       |          | 3        | 6        | 3        | 19       | 23              |
| 78 New York, Chicago & St. Louis .....               |             |          |          |            | 38       | 41       |          | 3        | 6        | 3        | 40       | 44              |
| 79 Ohio & Mississippi .....                          |             |          |          | 3          | 59       | 63       |          | 3        | 15       | 12       | 71       | 83              |
| 80 Ohio, Indiana & Western .....                     |             |          |          | 4          | 7        | 11       |          | 3        | 4        | 1        | 11       | 12              |
| 81 Penn. Co. (Op. Pittsburgh Ft. Wayne & Chi.) ..... | 1           |          | 1        |            | 10       | 14       |          | 1        | 14       | 12       | 18       | 30              |
| 82 Peoria & Pekin Union .....                        |             | 1        | 1        |            | 49       | 54       |          | 7        | 8        | 6        | 58       | 64              |
| 83 Peoria, Decatur & Evansville .....                |             | 2        | 2        |            | 15       | 15       |          | 1        | 3        | 2        | 18       | 20              |
| 84 Quincy, Omaha & Kansas City .....                 |             | 1        | 1        |            |          |          |          |          |          |          | 1        | 1               |
| 85 Rock Island & Peoria .....                        |             |          |          |            | 3        | 4        |          |          | 1        |          | 3        | 5               |
| 86 St. Louis, Alton & Terre Haute .....              | 1           |          | 1        | 3          | 3        | 6        |          | 1        | 8        | 11       | 4        | 15              |
| 87 St. Louis & Chicago .....                         |             |          |          |            |          |          |          |          | 1        |          |          | 1               |
| 88 St. Louis & Peoria .....                          |             |          |          |            | 2        | 3        |          |          | 2        |          | 2        | 3               |
| 89 Terminal Railroad Association of St. Louis .....  |             |          |          |            | 9        | 9        |          |          | 9        |          | 9        | 9               |
| 90 Terre Haute & Indianapolis .....                  | 1           |          | 1        | 1          | 20       | 31       |          | 1        | 21       | 8        | 37       | 45              |
| 91 Terre Haute & Peoria .....                        |             |          |          | 5          | 9        | 14       |          | 4        | 10       | 5        | 14       | 19              |
| 92 Toledo, Peoria & Western .....                    |             |          |          | 1          | 21       | 21       |          | 3        | 5        | 3        | 23       | 26              |
| 93 Toledo, St. Louis & Kansas City .....             |             |          |          |            | 21       | 22       |          | 1        | 22       | 3        | 23       | 26              |
| 94 Wabash .....                                      |             | 9        | 9        | 7          | 104      | 111      |          | 22       | 67       | 29       | 158      | 187             |
| 95 Wisconsin Central Lines .....                     |             |          |          |            | 8        | 8        |          | 1        | 1        |          | 9        | 9               |
| Totals .....   | 27          | 136      | 163      | 176        | 1,059    | 1,235    | 365      | 389      | 734      | 568      | 1,564    | 2,132           |





Table XV.—Continued.

|        | NAME OF COMPANY.                                    | KIND OF ACCIDENT.                |                           |               |                |                         |                         |                        |               |          |          |          |          | 29       | 30       |          |          |
|--------|---|----------------------------------|---------------------------|---------------|----------------|-------------------------|-------------------------|------------------------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|
|        |   | FALLING FROM TRAINS AND ENGINES. |                           |               |                |                         |                         | OTHER TRAIN ACCIDENTS. |               |          |          |          |          |          |          |          |          |
|        |   | COUPLING AND UN-COUPPLING.       | OVER-HEAD OB-STRUC-TIONS. | COL-LIS-IONS. | DE-RAIL-MENTS. | OTHER TRAIN AC-CIDENTS. | AT HIGH-WAY CROSS-INGS. | AT STA-TIONS.          | OTHER CAUSES. |          |          |          |          |          |          |          |          |
| 13     | 14  | 15                               | 16                        | 17            | 18             | 19                      | 20                      | 21                     | 22            | 23       | 24       | 25       | 26       | 27       | 28       | 29       | 30       |
|        |   | Killed..                         | Injured.                  | Killed..      | Injured.       | Killed..                | Injured.                | Killed..               | Injured.      | Killed.. | Injured. | Killed.. | Injured. | Killed.. | Injured. | Killed.. | Injured. |
| 67     | Indiana, Illinois & Iowa                            | 4                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 67       |
| 68     | Iowa Central  | 10                               | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 68       |
| 69     | Lake Erie & Western                                 | 7                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 69       |
| 70     | Lake Erie & Michigan Southern                       | 7                                | 3                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 70       |
| 71     | Lake Shore & Michigan Southern                      | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 71       |
| 72     | Louisville & Nashville                              | 13                               | 6                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 72       |
| 73     | Louisville, Evansville & St. Louis, (Consolidated)  | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 73       |
| 74     | Louisville, Evansville & St. Louis, (Consolidated)  | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 74       |
| 75     | Louisville, New Albany & Chicago                    | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 75       |
| 76     | Louisville, New Albany & Chicago                    | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 76       |
| 77     | Michigan Central                                    | 11                               | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 77       |
| 78     | Michigan Central                                    | 11                               | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 78       |
| 79     | Mobile & Ohio                                       | 10                               | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 79       |
| 80     | New York, Chicago & St. Louis                       | 10                               | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 80       |
| 81     | Ohio & Mississippi                                  | 11                               | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 81       |
| 82     | Ohio, Indiana & Western                             | 11                               | 3                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 82       |
| 83     | Ohio, Indiana & Western                             | 11                               | 3                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 83       |
| 84     | Ohio, Indiana & Western                             | 11                               | 3                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 84       |
| 85     | Ohio, Indiana & Western                             | 11                               | 3                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 85       |
| 86     | Ohio, Indiana & Western                             | 11                               | 3                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 86       |
| 87     | Pennsylvania Co. (Op. Pittsburgh, Ft. Wayne & Chi.) | 4                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 87       |
| 88     | Pennsylvania Co. (Op. Pittsburgh, Ft. Wayne & Chi.) | 4                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 88       |
| 89     | Peoria & Pekin Union                                | 5                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 89       |
| 90     | Peoria, Decatur & Evansville                        | 6                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 90       |
| 91     | Peoria, Decatur & Evansville                        | 6                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 91       |
| 92     | Peoria, Decatur & Evansville                        | 6                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 92       |
| 93     | Peoria, Decatur & Evansville                        | 6                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 93       |
| 94     | Quincy, Omaha & Kansas City                         | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 94       |
| 95     | Quincy, Omaha & Kansas City                         | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 95       |
| 96     | Rock Island and Peoria                              | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 96       |
| 97     | Rock Island and Peoria                              | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 97       |
| 98     | St. Louis, Alton & Terre Haute                      | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 98       |
| 99     | St. Louis, Alton & Terre Haute                      | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 99       |
| 100    | St. Louis & Chicago                                 | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 100      |
| 101    | St. Louis & Chicago                                 | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 101      |
| 102    | St. Louis & Chicago                                 | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 102      |
| 103    | Terminal Railroad Association of St. Louis          | 1                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 103      |
| 104    | Terre Haute & Indianapolis                          | 20                               | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 104      |
| 105    | Terre Haute & Indianapolis                          | 20                               | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 105      |
| 106    | Terre Haute & Peoria                                | 7                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 106      |
| 107    | Terre Haute & Peoria                                | 7                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 107      |
| 108    | Terre Haute & Peoria                                | 7                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 108      |
| 109    | Toledo, Peoria & Western                            | 9                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 109      |
| 110    | Toledo, Peoria & Western                            | 9                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 110      |
| 111    | Toledo, Peoria & Western                            | 9                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 111      |
| 112    | Toledo, St. Louis & Kansas City                     | 8                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 112      |
| 113    | Toledo, St. Louis & Kansas City                     | 8                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 113      |
| 114    | Wabash  | 39                               | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 114      |
| 115    | Wabash  | 39                               | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 115      |
| 116    | Wisconsin Central Lines                             | 3                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 116      |
| 117    | Wisconsin Central Lines                             | 3                                | 1                         | 1             | 1              | 1                       | 1                       | 1                      | 1             | 1        | 1        | 1        | 1        | 1        | 1        | 1        | 117      |
| Totals |   | 39                               | 433                       | 37            | 162            | 7                       | 14                      | 17                     | 95            | 16       | 52       | 102      | 152      | 53       | 70       | 25       | 529      |

TABLE XVI.—*Taxes paid in Illinois in 1888, 1889 and 1890, for years ending June 30.*

| NAME OF COMPANY.                                   | 1            | 2            | 3            |    |
|--|--------------|--------------|--------------|----|
|  | 1888.        | 1889.        | 1890.        |    |
| 1 Atchison, Topeka & S. Fe. (Form. C., S. F. & C.) | \$34,038 88  | \$57,355 86  | \$112,197 79 | 1  |
| 5 Baltimore & Ohio                                 | 15,890 48    | 4,151 43     | 14,512 28    | 5  |
| 7 Belt Railway of Chicago                          | 25,800 00    | 27,000 00    | 28,000 00    | 7  |
| 9 Chicago & Alton                                  | 190,878 57   | 200,081 00   | 185,403 13   | 9  |
| 12 Chicago & Atlantic                              | 30,655 50    | 24,842 31    | 31,055 29    | 12 |
| 14 Chicago & Eastern Illinois                      | 61,757 09    | 66,910 00    | 74,075 82    | 14 |
| 17 Chicago & Grand Trunk                           | 38,923 98    | 39,379 14    | 41,140 57    | 17 |
| 20 Chicago & Iowa                                  | 17,640 89    | 16,729 38    | 16,556 87    | 20 |
| 21 Chicago & Northwestern                          | 186,338 31   | 210,213 00   | 188,485 86   | 21 |
| 23 Chicago & Ohio River                            | 7,110 00     | 7,280 00     | 7,752 78     | 23 |
| Chicago & Western                                  | 1,353 80     |              |              |    |
| 24 Chicago, Burlington & Northern                  | 20,526 66    | 22,193 73    | 20,884 01    | 24 |
| 25 Chicago, Burlington & Quincy                    | 310,065 55   | 286,445 77   | 295,403 11   | 25 |
| 26 Galesburg and Rio                               | 1,632 63     | 1,525 87     | 1,485 25     | 26 |
| 27 Illinois Valley & Northern                      |              | 5,812 30     | 8,389 46     | 27 |
| 28 St. Louis, Rock Island & Chicago                | 53,867 71    | 48,214 53    | 50,455 14    | 28 |
| 29 Chicago, Milwaukee & St. Paul                   | 87,151 33    | 91,084 40    | 90,608 40    | 29 |
| 30 Chicago, Peoria & St. Louis                     | (1)10,598 26 | (2)12,322 12 | 16,737 61    | 30 |
| 34 Chicago, Rock Island & Pacific                  | 144,860 02   | 143,203 90   | 148,505 77   | 34 |
| 36 Chicago, St. Louis & Pittsburgh                 | 36,131 70    | 47,528 89    | 49,224 24    | 36 |
| 37 Englewood Connecting                            |              |              | 1,813 33     | 37 |
| 38 Chicago, St. Paul & Kansas City                 | 1,276 62     | 19,693 41    | 22,681 31    | 38 |
| 39 Cleveland, Cincinnati, Chi. & St. Louis         | 118,119 21   | 117,850 15   | 135,471 88   | 39 |
| 42 Kankakee & Seneca                               | 6,218 21     | 6,600 44     | 6,496 59     | 42 |
| 44 DePue, Ladd & Eastern                           |              |              | 150 15       | 44 |
| 45 East St. Louis & Carondelet                     | 4,098 24     | 4,349 22     | 3,155 72     | 45 |
| 46 East St. Louis Connecting                       | 10,315 97    | 1,458 83     | 2,100 54     | 46 |
| 48 Elgin, Joliet & Eastern                         |              | 7,492 75     | 17,524 86    | 48 |
| 51 Fulton County Narrow Gauge                      | 1,934 54     | 1,931 98     | 2,589 81     | 51 |
| 53 Grand Tower & Carbondale                        | 5,485 26     | 4,948 45     | 5,030 60     | 53 |
| Illinois & St. Louis Railroad and Coal             | 7,355 40     |              |              |    |
| 55 Illinois Central                                | 486,909 13   | 507,403 42   | 555,634 39   | 55 |
| 65 Indiana & Illinois Southern                     | 8,615 31     | 5,445 06     | 5,814 41     | 65 |
| Indiana, Bloomington & Western                     | 18,627 60    |              |              |    |
| 66 Indianapolis, Decatur & Western                 | 13,968 68    | 13,547 49    | 13,592 30    | 66 |
| 67 Indiana, Illinois & Iowa                        | 10,134 34    | 10,098 12    | 8,826 94     | 67 |
| 68 Iowa Central                                    | 17,555 21    | 12,071 37    | 12,067 10    | 68 |
| Joliet, Aurora & Northern                          | 2,191 05     |              |              |    |
| 71 Lake Erie & Western                             | 7,984 06     | 15,559 44    | 18,062 88    | 71 |
| 72 Lake Shore & Michigan Southern                  | 45,168 87    | 46,089 95    | 48,069 91    | 72 |
| 74 Louisville & Nashville                          | 34,595 26    | 32,633 36    | 37,232 93    | 74 |
| 76 Louisville, Evansville & St. L. Consol.         | 9,583 37     | 16,828 72    | 17,652 22    | 76 |
| 77 Louisville, New Albany & Chicago                |              | 45 07        | 14,513 90    | 77 |
| 78 Michigan Central                                | 23,299 64    | 25,905 75    | 18,617 55    | 78 |
| 80 Mobile & Ohio                                   | 29,938 15    | 32,362 50    | 28,755 58    | 80 |
| 83 New York, Chicago & St. Louis                   | 15,206 63    | 17,348 55    | 18,756 70    | 83 |
| 85 Ohio & Mississippi                              | 83,723 82    | 80,630 08    | 86,134 08    | 85 |
| 86 Ohio, Indiana & Western                         | 13,305 43    | 31,483 47    | 14,453 28    | 86 |
| 88 Pennsylvania Co. (Op. Calumet River)            |              |              | 1,257 38     | 88 |
| 88 Pennsylvania Co. (Op. P., Ft. W. & C.)          | 63,070 12    | 69,200 80    | 66,548 52    | 88 |
| 88 Pennsylvania Co. (Op. So. Chi. & Southern)      |              | 3,872 72     | 4,667 25     | 88 |
| 92 Peoria & Pekin Union                            | 20,072 08    | 22,184 29    | 22,936 45    | 92 |
| 93 Peoria, Decatur & Evansville                    | 32,946 23    | 35,128 85    | 34,193 90    | 93 |
| 94 Quincy, Omaha & Kansas City                     |              |              | 1,206 57     | 94 |
| 95 Rock Island & Peoria                            | 22,933 06    | 22,008 83    | 23,296 44    | 95 |
| 96 St. Louis, Alton & Springfield                  |              | 6,052 50     | 8,655 21     | 96 |
| 98 St. Louis, Alton & Terre Haute                  | 38,271 37    | 34,742 53    | 36,921 65    | 98 |
| St. Louis & Central Illinois                       | 5,935 58     |              |              |    |

Table XVI—Continued.

|     | NAME OF COMPANY.                              | 1              | 2              | 3              |     |
|-----|---|----------------|----------------|----------------|-----|
|     |   | 1888.          | 1889.          | 1890.          |     |
| 105 | St. Louis & Chicago .....                     | \$1,712 83     | \$1,750 00     | \$3,729 69     | 105 |
| 106 | St. Louis & Peoria .....                      |                |                | 800 00         | 106 |
|     | St. Louis Bridge & Tunnel .....               |                | 54,101 99      |                |     |
| 107 | Terminal R. R. Association of St. Louis ..... |                |                | 36,457 54      | 107 |
| 108 | Terre Haute & Indianapolis .....              | (3)57,103 38   | (3)54,517 90   | (3)52,341 70   | 108 |
| 110 | Terre Haute & Peoria .....                    | 16,053 85      | 15,239 93      | 14,996 64      | 110 |
| 111 | Toledo, Peoria & Western .....                | 34,308 29      | 34,451 22      | 34,836 45      | 111 |
| 112 | Toledo, St. Louis & Kansas City .....         | 13,071 02      | 11,152 93      | 13,787 79      | 112 |
| 114 | Wabash .....                                  |                |                | 171,202 60     | 114 |
| 115 | Wabash, Chester & Western .....               | 3,177 81       | 2,490 18       | 3,025 36       | 115 |
|     | Wabash, St. Louis & Pacific .....             | 173,229 12     | 123,175 10     |                |     |
|     | Wabash Western .....                          | 2,326 50       | 1,778 00       |                |     |
| 116 | Wisconsin Central Lines .....                 | 4,969 93       | 9,726 44       | 13,941 01      | 116 |
|     | Totals .....                                  | \$2,739,612 53 | \$2,825,988 72 | \$3,021,904 49 |     |

(1) Jacksonville Southeastern in 1888.

(2) Louisville &amp; St. Louis in 1889.

(3) Paid by lessor company.



Table XVII—Continued.

| NAME OF COMPANY.                           | 1              | 2            | 3              | DEDUCTIONS FROM INCOME.        |                                 |                   |   |                          | 7   | 8 |                        |                                    |
|--|----------------|--------------|----------------|--------------------------------|---------------------------------|-------------------|---|--------------------------|-----|---|------------------------|------------------------------------|
|  |                |              |                | Income from lease of road..... | Income from other sources ..... | Total income..... | Salaries and maintenance of organization..... | Interest on funded debt. |     |   | Other deductions ..... | Total deductions from income ..... |
|  |                |              |                |                                |                                 |                   |   |                          |     |   |                        |                                    |
| 98 St. Louis, Alton & Terre Haute—(1)      | \$30,000 00    | \$32 86      | \$30,032 86    | \$2 00                         | \$20,100 00                     | .....             | \$20,102 00                                   | \$230 86                 | 98  |   |                        |                                    |
| 99 Belleville & Carondelet.....            | 17,350 80      | 50 62        | 17,401 42      | .....                          | 15,100 00                       | .....             | 15,100 00                                     | 2,001 42                 | 99  |   |                        |                                    |
| 100 Belleville & Eldorado.....             | 185,170 57     | 46 66        | 185,217 23     | 3,617 25                       | 81,920 00                       | \$5,000 00        | 90,537 25                                     | 94,679 98                | 100 |   |                        |                                    |
| 101 Belleville & Southern Illinois.....    | 50,000 00      | .....        | 50,000 00      | .....                          | 50,000 00                       | .....             | 50,000 00                                     | .....                    | 101 |   |                        |                                    |
| 102 Chicago, St. Louis & Paducah.....      | 50,000 00      | .....        | 50,000 00      | .....                          | 50,000 00                       | .....             | 50,000 00                                     | .....                    | 102 |   |                        |                                    |
| 103 St. Louis Southern.....                | 47,940 19      | .....        | 47,940 19      | 505 67                         | 22,000 00                       | 23,910 11         | 46,415 78                                     | 1,524 41                 | 103 |   |                        |                                    |
| 104 Carbondale & Shawneetown.....          | 10,000 00      | .....        | 10,000 00      | .....                          | 10,000 00                       | .....             | 10,000 00                                     | .....                    | 104 |   |                        |                                    |
| 105 Terre Haute & Indianapolis—(1)         | 549,897 37     | 127,006 32   | 676,903 69     | 100 00                         | 314,930 00                      | 54,665 60         | 369,635 60                                    | 307,208 09               | 105 |   |                        |                                    |
| 106 St. Louis, Vandalia & Terre Haute..... | .....          | .....        | .....          | .....                          | .....                           | .....             | .....   | .....                    | 106 |   |                        |                                    |
| Totals .....                               | \$6,191,670 12 | \$607,607 57 | \$6,799,277 09 | \$31,622 58                    | \$2,904,360 58                  | \$296,803 06      | \$3,232,786 22                                | \$3,697,444 23           | 109 |   |                        |                                    |

(1) Inserted to show relation of roads following.



Table XVII—Continued.

| NAME OF COMPANY.                       | 9                | 10                  | 11             | 12                   | 13             | 14                               | 15                               | 16                                    | 17                                       |
|--|------------------|---------------------|----------------|----------------------|----------------|----------------------------------|----------------------------------|---------------------------------------|--|
|  | Net deficit..... | DIVIDENDS DECLARED. |                |                      |                | Other payments from net income.. | Total payments from net income.. | Surplus for year ending June 30, 1890 | Deficit for year ending June 30, 1890... |
|  |                  | Common stock        | Rate per cent. | Preferred stock..... | Rate per cent. |                                  |                                  |                                       |  |
|  |                  |                     |                |                      |                |                                  |                                  |                                       |  |
| Chicago & Alton—(1)                    |                  | \$105,000 00        | 7              |                      |                | \$12,000 00                      | \$33,000 00                      |                                       | 9  |
| Joliet & Chicago.....                  |                  | 21,000 00           | 7              |                      |                |                                  |                                  |                                       | 10                                       |
| Mississippi River Bridge.....          |                  |                     |                |                      |                |                                  |                                  |                                       | 11                                       |
| Chicago & Eastern Illinois—(1)         |                  |                     |                |                      |                |                                  |                                  |                                       | 12                                       |
| Chicago & Western Indiana.....         |                  | 150,000 00          | 3              |                      |                |                                  | 150,000 00                       | \$122,410 50                          | 13                                       |
| Evansville, Terre Haute & Chicago..... |                  |                     |                |                      |                |                                  |                                  | 1,834 49                              | 14                                       |
| Chicago, Rock Island & Pacific—(1)     |                  |                     |                |                      |                |                                  |                                  |                                       | 15                                       |
| Chicago, Rock Island & Pacific—(1)     |                  |                     |                |                      |                |                                  |                                  |                                       | 16                                       |
| Peoria & Bureau Valley.....            |                  |                     |                |                      |                |                                  |                                  |                                       | 17                                       |
| Chicago, St. Louis & Pittsburgh—(1)    |                  | 135,000 00          | 9              |                      |                |                                  | 135,000 00                       |                                       | 18                                       |
| Englewood Connecting.....              |                  |                     |                |                      |                |                                  |                                  |                                       | 19                                       |
| Elgin, Joliet & Eastern—(1)            |                  |                     |                |                      |                |                                  |                                  | 1,224 85                              | 20                                       |
| Gardner, Coal City & Northern.....     |                  |                     |                |                      |                |                                  |                                  |                                       | 21                                       |
| Waukegan & Southwestern.....           | \$15,312 96      |                     |                |                      |                |                                  |                                  | 26,500 60                             | 22                                       |
| Illinois Central—(1)                   |                  |                     |                |                      |                |                                  |                                  |                                       | 23                                       |
| Chicago, Havana & Western.....         |                  | 80,792 30           |                |                      |                |                                  |                                  |                                       | 24                                       |
| Bantou.....                            |                  | 29,820 83           |                |                      |                |                                  |                                  |                                       | 25                                       |
| South Chicago.....                     |                  |                     |                |                      |                |                                  |                                  |                                       | 26                                       |
| Michigan Central—(1)                   |                  |                     |                |                      |                |                                  |                                  |                                       | 27                                       |
| Joliet & Northern Indiana.....         |                  |                     |                |                      |                |                                  |                                  |                                       | 28                                       |
| New York, Chicago & St. Louis—(1)      |                  |                     |                |                      |                |                                  |                                  |                                       | 29                                       |
| Chicago & State Line.....              |                  |                     |                |                      |                |                                  |                                  |                                       | 30                                       |
| Pennsylvania Co.—(1)                   |                  |                     |                |                      |                |                                  |                                  |                                       | 31                                       |
| Pittsburgh, Ft. Wayne & Chicago.....   |                  | 1,380,000 00        | 7              | \$860,146 00         | 7              |                                  | 2,240,146 00                     | 441,342 40                            | 32                                       |
| South Chicago & Southern.....          | 5,026 67         |                     |                |                      |                |                                  |                                  |                                       | 33                                       |

Table XVII—Continued.

| NAME OF COMPANY.                           | 9                | DIVIDENDS DECLARED. |                 |                       |                 | 13 | 14                               | 15                               | 16                                    | 17.                                      |
|--|------------------|---------------------|-----------------|-----------------------|-----------------|----|----------------------------------|----------------------------------|---------------------------------------|--|
|  |                  | Common stock        | Rate per cent . | Preferred stock ..... | Rate per cent . |    |                                  |                                  |                                       |  |
|  | Net deficit..... |                     |                 |                       |                 |    | Other payments from net income.. | Total payments from net income.. | Surplus for year ending June 30, 1890 | Deficit for year ending June 30, 1890... |
| 98 St. Louis, Alton & Terre Haute—(1)      |                  |                     |                 |                       |                 |    |                                  |                                  | \$930 86                              | 98                                       |
| 99 Belleville & Carondelet.....            |                  |                     |                 |                       |                 |    |                                  |                                  | 2,001 42                              | 99                                       |
| 100 Belleville & Eldorado.....             |                  |                     |                 |                       |                 |    |                                  |                                  | 2,232 48                              | 100                                      |
| 101 Belleville & Southern Illinois.....    |                  |                     |                 | \$92,437 50           | 7%              |    |                                  | \$92,437 50                      | 1,524 41                              | 101                                      |
| 102 St. Louis Southern.....                |                  |                     |                 |                       |                 |    |                                  |                                  |                                       | 102                                      |
| 103 Terre Haute & Indianapolis—(1)         |                  |                     |                 |                       |                 |    |                                  |                                  |                                       | 103                                      |
| 108 St. Louis, Vandalia & Terre Haute..... |                  |                     |                 |                       |                 |    |                                  |                                  | 397,208 09                            | 108                                      |
| 109 Totals .....                           | \$130,952 76     | \$1,815,000 00      |                 | \$952,583 50          |                 |    | \$12,000 00                      | \$2,074,583 50                   | \$928,924 53                          | 109                                      |
|  |                  |                     |                 |                       |                 |    |                                  |                                  |                                       | \$142,016 56                             |

(1) Inserted to show relation of roads following.



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LIST OF  
RAILROAD OFFICIALS.

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# ATCHISON, TOPEKA & SANTA FE RAILROAD COMPANY.

## OFFICERS.

| Title.                                     | Name.                  | Location of Office. |
|--|------------------------|---------------------|
| Chairman of the Board.....                 | Geo. C. Magoun.....    | Boston, Mass.....   |
| President.....                             | Allen Manvel.....      | Chicago, Ill.....   |
| Assistant to President.....                | J. D. Springer.....    | “                   |
| Vice-President, 1st.....                   | J. W. Reinhart.....    | Boston, Mass.....   |
| Vice-President, 2d.....                    | A. A. Robinson.....    | Topeka, Kas.....    |
| Secretary and Treasurer.....               | E. Wilder.....         | “                   |
| Assistant Treasurer.....                   | Geo. L. Goodwin.....   | Boston, Mass.....   |
| Assistant Secretary.....                   | L. C. Denning.....     | “                   |
| General Solicitor.....                     | Geo. R. Peck.....      | Topeka, Kas.....    |
| General Counsel.....                       | Jno. J. McCook.....    | New York, N. Y..... |
| Comptroller.....                           | Jas. P. Whitehead..... | Boston, Mass.....   |
| Assistant General Auditor.....             | W. K. Gillett.....     | Topeka, Kas.....    |
| Auditor.....                               | H. C. Clements.....    | “                   |
| Freight and Traffic Manager.....           | J. A. Hanley.....      | Chicago, Ill.....   |
| Assistant Freight and Traffic Manager..... | W. B. Biddle.....      | “                   |
| General Freight Agent.....                 | F. C. Gav.....         | Topeka, Kas.....    |
| Assistant General Freight Agent.....       | J. G. Miller.....      | Chicago, Ill.....   |
| Assistant General Freight Agent.....       | A. P. Tanner.....      | Topeka, Kas.....    |
| Assistant General Freight Agent.....       | Chas. R. Hudson.....   | “                   |
| Assistant General Freight Agent.....       | O. H. Brown.....       | “                   |
| General Passenger Agent.....               | Geo. T. Nicholson..... | “                   |
| General Ticket Agent.....                  | Jno. J. Byrne.....     | Chicago, Ill.....   |
| General Baggage Agent.....                 | P. Walsh.....          | Topeka, Kan.....    |
| Superintendent of Telegraph.....           | R. B. Gemmel.....      | “                   |
| Land Commissioner.....                     | Jas. E. Frost.....     | “                   |

# CHICAGO, SANTA FE & CALIFORNIA RAILWAY COMPANY.

## OFFICERS.

| Title.                                 | Name.                   | Location of Office. |
|--|-------------------------|---------------------|
| President.....                         | A. Manvel.....          | Chicago, Ill.....   |
| 1st Vice-President.....                | J. D. Springer.....     | “                   |
| Secretary and Treasurer.....           | D. L. Gallup.....       | “                   |
| Assistant Treasurer.....               | Geo. L. Goodwin.....    | Boston, Mass.....   |
| General Solicitor.....                 | Geo. R. Peck.....       | Topeka, Kas.....    |
| Comptroller.....                       | J. P. Whitehead.....    | Boston, Mass.....   |
| General Auditor.....                   | J. W. Reinhart.....     | “                   |
| Acting Auditor.....                    | S. L. Crim.....         | Chicago, Ill.....   |
| Assistant General Freight Agent.....   | J. G. Miller.....       | “                   |
| Assistant General Passenger Agent..... | J. J. Byrne.....        | “                   |
| General Superintendent.....            | C. O. Wheeler.....      | “                   |
| Manager of Elevator.....               | Charles Counselman..... | “                   |



# ATCHISON, TOPEKA & SANTA FE RAILROAD COMPANY IN CHICAGO.

## OFFICERS.

| Title.                       | Name.                | Location of Office. |
|------------------------------|----------------------|---------------------|
| President .....              | A. Manvel.....       | Chicago, Ill.....   |
| Vice-President .....         | S. B. French.....    | “ “ .....           |
| Secretary and Treasurer..... | D. L. Gallup.....    | “ “ .....           |
| Assistant Treasurer.....     | C. S. Tuckerman..... | Boston, Mass.....   |
| Comptroller.....             | J. P. Whitehead..... | “ “ .....           |
| General Auditor.....         | J. W. Reinhart.....  | “ “ .....           |
| Acting Auditor.....          | S. L. Crim.....      | Chicago, Ill.....   |

# THE MISSISSIPPI RIVER RAILROAD AND TOLL BRIDGE COMPANY.

## OFFICERS.

| Title.                   | Name.                | Location of Office. |
|--------------------------|----------------------|---------------------|
| President .....          | A. Manvel.....       | Chicago, Ill.....   |
| Secretary .....          | D. L. Gallup.....    | “ “ .....           |
| Treasurer .....          | D. L. Gallup.....    | “ “ .....           |
| Assistant Treasurer..... | G. L. Goodwin.....   | Boston, Mass.....   |
| Assistant Secretary..... | C. S. Tuckerman..... | “ “ .....           |
| Comptroller .....        | J. P. Whitehead..... | “ “ .....           |
| Auditor General.....     | J. W. Reinhart.....  | “ “ .....           |
| Acting Auditor.....      | S. L. Crim.....      | Chicago, Ill.....   |
| Chief Engineer.....      | A. A. Robinson ..... | Topeka, Kas .....   |

# THE BALTIMORE & OHIO RAILROAD COMPANY.

## OFFICERS.

| Title.                                      | Name.                | Location of Office. |
|---|----------------------|---------------------|
| Attorney or General Counsel.....            | John K. Cowen.....   | Baltimore, Md ..... |
| Auditor, General.....                       | W. I. Thelin .....   | “ “ .....           |
| General Manager.....                        | J. T. O'Dell .....   | “ “ .....           |
| Chief Engineer.....                         | H. T. Douglas.....   | “ “ .....           |
| Traffic Manager.....                        | Frank Harriott.....  | “ “ .....           |
| General Freight Agent .....                 | C. S. Wright.....    | Pittsburgh, Pa..... |
| General Passenger Agent.....                | C. O. Scull.....     | Baltimore, Md.....  |
| Assistant General Passenger Agent .....     | L. S. Allen.....     | Chicago, Ill.....   |
| Division Superintendent.....                | F. H. Britton.....   | “ “ .....           |
| Superintendent of Telegraph.....            | Chas. Selden.....    | Baltimore, Md.....  |
| General Baggage Agent.....                  | B. E. Peddicord..... | “ “ .....           |
| Agent in Illinois, for transfer of stock... | P. C. Sneed.....     | Chicago, Ill.....   |

## BALTIMORE &amp; OHIO &amp; CHICAGO RAILROAD COMPANY.

## OFFICERS.

| Title.                       | Name.             | Location of Office. |
|------------------------------|-------------------|---------------------|
| President .....              | Orland Smith..... | Baltimore, Md. .... |
| Secretary and Treasurer..... | P. C. Sneed ..... | Chicago, Ill. ....  |

## BELT RAILWAY CO. OF CHICAGO.

## OFFICERS.

| Title.                      | Name.                 | Location of Office. |
|-----------------------------|-----------------------|---------------------|
| Chairman of the Board ..... | Volney T. Malott..... | Chicago, Ill. ....  |
| President .....             | Volney T. Malott..... | “ “ .....           |
| Vice-President.....         | B. Thomas .....       | “ “ .....           |
| Secretary.....              | M. J. Clark .....     | “ “ .....           |
| Treasurer.....              | J. E. Murphy.....     | “ “ .....           |
| General Solicitor.....      | Chas. M. Osborn.....  | “ “ .....           |
| Auditor .....               | M. J. Clark.....      | “ “ .....           |
| General Manager.....        | B. Thomas.....        | “ “ .....           |

## CENTRALIA &amp; CHESTER RAILROAD COMPANY.

## OFFICERS.

| Title.                                      | Name.                 | Location of Office.  |
|---|-----------------------|----------------------|
| President .....                             | T. B. Needles .....   | Nashville, Ill. .... |
| Vice-President.....                         | C. E. Smith .....     | New York, N. Y. .... |
| Secretary .....                             | S. L. Dwight .....    | Centralia, Ill. .... |
| Treasurer.....                              | J. M. McCutcheon..... | Sparta, Ill. ....    |
| Auditor .....                               | R. H. Rosborough..... | “ “ .....            |
| General Manager.....                        | J. M. McCutcheon..... | “ “ .....            |
| General Freight Agent.....                  | H. G. Borneman .....  | “ “ .....            |
| General Passenger Agent.....                | H. G. Borneman .....  | “ “ .....            |
| Agent in Illinois, for transfer of stock... | S. L. Dwight.....     | Centralia, Ill. .... |

## CHICAGO &amp; ALTON RAILROAD COMPANY.

## OFFICERS.

| Title.                                       | Name.                         | Location of Office.    |
|--|-------------------------------|------------------------|
| President .....                              | T. B. Blackstone .....        | Chicago, Ill. ....     |
| Vice-President.....                          | J. C. McMullin .....          | “ “ .....              |
| Secretary and Treasurer.....                 | C. H. Foster .....            | “ “ .....              |
| General Solicitor.....                       | Wm. Brown .....               | “ “ .....              |
| Auditor General.....                         | Chauncey Kelsey.....          | “ “ .....              |
| General Manager.....                         | C. H. Chappell .....          | “ “ .....              |
| Chief Engineer .....                         | K. F. Booth .....             | “ “ .....              |
| General Freight Agent.....                   | H. H. Courtright.....         | “ “ .....              |
| General Passenger Agent.....                 | James Charlton .....          | “ “ .....              |
| Division Superintendent .....                | A. M. Richards.....           | Bloomington, Ill. .... |
| Division Superintendent .....                | M. K. Morley .....            | Roodhouse, Ill. ....   |
| Superintendent of Telegraph .....            | H. V. Miller.....             | Bloomington, Ill. .... |
| Superintendent of Transportation.....        | T. M. Bates.....              | “ “ .....              |
| General Baggage Agent.....                   | C. Huntington.....            | Chicago, Ill. ....     |
| Agent in Illinois, for transfer of stock.... | C. H. Foster, Secretary ..... | “ “ .....              |

## JOLIET &amp; CHICAGO RAILROAD COMPANY.

## OFFICERS.

| Title.                                       | Name.                         | Location of Office. |
|--|-------------------------------|---------------------|
| President .....                              | John B. Drake .....           | Chicago, Ill. ....  |
| Secretary .....                              | Chas. H. Foster .....         | " .....             |
| Agent in Illinois for transfer of stock .... | Chas. H. Foster, Secretary... | " .....             |

## MISSISSIPPI RIVER BRIDGE.

## OFFICERS.

| Title.                                       | Name.                  | Location of Office. |
|--|------------------------|---------------------|
| President .....                              | James C. McMullin..... | Chicago, Ill. ....  |
| Secretary and Treasurer .....                | Chas. H. Foster.....   | " .....             |
| Agent in Illinois for transfer of stock .... | Chas. H. Foster.....   | " .....             |

## CHICAGO &amp; ATLANTIC RAILWAY COMPANY.

## OFFICERS.

| Title.                                   | Name.                  | Location of Office. |
|--|------------------------|---------------------|
| Receiver .....                           | Volney T. Ma'ott ..... | Chicago, Ill. ....  |
| Attorneys or General Counsel .....       | Baker & Daniels.....   | Indianapolis, Ind.. |
| Assistant Attorney or General Counsel .. | John A. Henry .....    | Chicago, Ill. ....  |
| Auditor.....                             | J. D. Kershaw .....    | " .....             |
| General Agent for Receiver.....          | L. G. Cannon.....      | " .....             |
| General Freight Agent .....              | G. G. Cochran.....     | " .....             |
| General Passenger Agent.....             | F. C. McDonald.....    | " .....             |
| General Ticket Agent.....                | F. C. McDonald.....    | " .....             |
| Superintendent .....                     | C. L. Mayne.....       | Huntington, Ind...  |
| Master Mechanic.....                     | J. H. Berry .....      | " .....             |
| Paymaster .....                          | H. D. Hamilton.....    | Chicago, Ill. ....  |
| General Baggage Agent.....               | F. C. McDonald.....    | " .....             |

## CHICAGO &amp; CALUMET TERMINAL RAILWAY COMPANY.

## OFFICERS.

| Title.          | Name.                 | Location of Office. |
|-----------------|-----------------------|---------------------|
| President ..... | David S. Wegg .....   | Chicago, Ill. ....  |
| Secretary ..... | Henry S. Boutell..... | " .....             |
| Treasurer ..... | David S. Wegg .....   | " .....             |

## CHICAGO &amp; EASTERN ILLINOIS RAILROAD COMPANY.

## OFFICERS.

| Title.                                       | Name.                     | Location of Office.  |
|--|---------------------------|----------------------|
| Chairman of the Board.....                   | H. H. Porter.....         | Chicago, Ill.....    |
| President and General Manager.....           | Geo. W. Saul.....         | ".....               |
| Vice-President.....                          | O. S. Lyford.....         | ".....               |
| 2d Vice-President and Treasurer.....         | C. W. Hillard.....        | ".....               |
| Secretary and Auditor.....                   | H. A. Rubidge.....        | ".....               |
| Assistant Treasurer.....                     | A. R. Flower.....         | New York, N. Y....   |
| Cashier and Paymaster.....                   | A. S. Cullum.....         | Chicago, Ill.....    |
| Chief Engineer and Sup't of Maintenance..... | H. F. Baldwin.....        | ".....               |
| General Solicitor.....                       | W. H. Lyford.....         | ".....               |
| General Traffic Manager.....                 | G. J. Grammer.....        | Evansville, Ind..... |
| General Freight Agent.....                   | F. V. Davis.....          | Chicago, Ill.....    |
| General Passenger and Ticket Agent.....      | Wm. Hill.....             | ".....               |
| Ass't General Passenger and Ticket Ag't..... | Chas. L. Stone.....       | ".....               |
| Ass't General Freight Agent.....             | H. E. Felton.....         | ".....               |
| General Superintendent.....                  | D. R. Paterson.....       | ".....               |
| Superintendent of Transportation.....        | T. W. Burrows.....        | Danville, Ill.....   |
| General Master Mechanic.....                 | Allen Cooke.....          | ".....               |
| General Baggage Agent.....                   | F. R. Wheeler.....        | Evansville, Ind....  |
| Purchasing Agent.....                        | Robert Spencer.....       | Chicago, Ill.....    |
| Agent in Illinois, for transfer of stock.... | H. A. Rubidge, Sec'y..... | ".....               |

## CHICAGO &amp; WESTERN INDIANA RAILROAD COMPANY.

## OFFICERS.

| Title.                     | Name.                 | Location of Office. |
|----------------------------|-----------------------|---------------------|
| Chairman of the Board..... | Volney T. Malott..... | Chicago, Ill.....   |
| President.....             | Volney T. Malott..... | ".....              |
| Vice-President.....        | B. Thomas.....        | ".....              |
| Secretary.....             | M. J. Clark.....      | ".....              |
| Treasurer.....             | John E. Murphy.....   | ".....              |
| General Solicitor.....     | Chas. M. Osborn.....  | ".....              |
| Auditor.....               | M. J. Clark.....      | ".....              |
| General Manager.....       | B. Thomas.....        | ".....              |

## EVANSVILLE, TERRE HAUTE &amp; CHICAGO RAILWAY COMPANY.

## OFFICERS.

| Title.         | Name.              | Location of Office. |
|----------------|--------------------|---------------------|
| President..... | C. W. Hillard..... | Chicago, Ill.....   |
| Secretary..... | S. H. Spooner..... | ".....              |
| Treasurer..... | C. W. Hillard..... | ".....              |

## CHICAGO &amp; GRAND TRUNK RAILWAY COMPANY.

## OFFICERS.

| Title.                                       | Name.                   | Location of Office.     |
|--|-------------------------|-------------------------|
| Chairman of the Board.....                   | Sir Joseph Hickson..... | Montreal, Prov. Q.      |
| President.....                               | Sir Joseph Hickson..... | "                       |
| Vice-President.....                          | L. J. Seargeant.....    | "                       |
| Secretary.....                               | Charles Percy.....      | "                       |
| Treasurer.....                               | James H. Muir.....      | Detroit, Mich.....      |
| Chief Engineer.....                          | Geo. Masson.....        | "                       |
| General Solicitor.....                       | E. W. Meddaugh.....     | "                       |
| General Manager.....                         | W. J. Spicer.....       | "                       |
| Traffic Manager.....                         | Geo. B. Reeve.....      | Chicago, Ill.....       |
| Ass't General Freight Agent.....             | David Brown.....        | "                       |
| General Passenger and Ticket Agent.....      | W. E. Davis.....        | "                       |
| Superintendent.....                          | A. B. Atwater.....      | Detroit, Mich.....      |
| Ass't Superintendent.....                    | A. R. McIntyre.....     | Battle Creek, Mich..... |
| Mechanical Superintendent.....               | Herbert Roberts.....    | Detroit, Mich.....      |
| General Storekeeper.....                     | Jno. S. Lorimer.....    | "                       |
| General Baggage Agent.....                   | J. E. Quick.....        | "                       |
| Agent in Illinois, for transfer of stock.... | F. A. Howe.....         | Chicago, Ill.....       |

## GRAND TRUNK JUNCTION RAILWAY COMPANY.

## OFFICERS.

| Title.                                       | Name.                   | Location of Office. |
|--|-------------------------|---------------------|
| Chairman of the Board.....                   | Sir Joseph Hickson..... | Montreal, Prov. Q.  |
| President.....                               | Sir Joseph Hickson..... | "                   |
| Vice-President.....                          | F. A. Howe.....         | Chicago, Ill.....   |
| Secretary.....                               | Charles Percy.....      | Montreal, Prov. Q.  |
| Treasurer.....                               | James H. Muir.....      | Detroit, Mich.....  |
| General Solicitor.....                       | E. W. Meddaugh.....     | "                   |
| General Manager.....                         | W. J. Spicer.....       | "                   |
| Agent in Illinois, for transfer of stock.... | F. A. Howe.....         | Chicago, Ill.....   |

## CHICAGO &amp; ILLINOIS SOUTHERN RAILROAD COMPANY.

## OFFICERS.

| Title.              | Name.                   | Location of office. |
|---------------------|-------------------------|---------------------|
| President.....      | John S. Hannah.....     | Chicago, Ill.....   |
| Vice-President..... | Wm. P. Harvey.....      | Baltimore, Md.....  |
| Secretary.....      | Geo. M. Patch.....      | Chicago, Ill.....   |
| Treasurer.....      | Geo. S. McReynolds..... | "                   |



## CHICAGO &amp; IOWA RAILROAD COMPANY.

## OFFICERS.

| Title.   | Name.                 | Location of office. |
|--|-----------------------|---------------------|
| President .....                                | F. H. Head .....      | Chicago, Ill. ....  |
| First Vice-President .....                     | J. C. Peasley .....   | " .....             |
| Second Vice-President .....                    | G. B. Harris .....    | " .....             |
| Secretary .....                                | L. O. Goddard .....   | " .....             |
| Treasurer .....                                | J. C. Peasley .....   | " .....             |
| Assistant Treasurer .....                      | F. Clark .....        | Rochelle, Ill. .... |
| Assistant Attorney or Counsel .....            | M. D. Hathaway .....  | " .....             |
| Auditor, General .....                         | Jno. L. Lathrop ..... | Chicago, Ill. ....  |
| Auditor .....                                  | F. Clark .....        | Rochelle, Ill. .... |
| General Freight and Passenger Agent .....      | H. D. Judson .....    | " .....             |
| General Superintendent .....                   | H. D. Judson .....    | " .....             |
| General Baggage Agent .....                    | E. A. Sudd .....      | Chicago, Ill. ....  |
| Agent in Illinois, for transfer of stock ..... | L. O. Goddard .....   | " .....             |

## CHICAGO &amp; NORTHWESTERN RAILWAY COMPANY.

## OFFICERS.

| Title.   | Name.                                 | Location of Office.    |
|--|---------------------------------------|------------------------|
| Chairman of the Board .....                    | Albert Keep .....                     | Chicago, Ill. ....     |
| President .....                                | Marvin Hughitt .....                  | " .....                |
| Vice-President .....                           | Martin L. Sykes .....                 | New York, N. Y. ....   |
| Second Vice-President .....                    | Marshall M. Kirkman .....             | Chicago, Ill. ....     |
| Third Vice-President .....                     | William H. Newman .....               | " .....                |
| Secretary .....                                | Martin L. Sykes .....                 | New York, N. Y. ....   |
| Treasurer .....                                | Martin L. Sykes .....                 | " .....                |
| Assistant Treasurers .....                     | S. O. Howe and J. B. Redfield .....   | New York, N. Y. ....   |
| Chief Engineer .....                           | John E. Blunt .....                   | and Chicago, Ill. .... |
| General Counsel .....                          | William C. Goudy .....                | Chicago, Ill. ....     |
| General Attorney .....                         | William B. Keep .....                 | " .....                |
| Auditor .....                                  | Joseph B. Redfield .....              | " .....                |
| General Manager .....                          | John M. Whitman .....                 | " .....                |
| General Freight Agent .....                    | Hiram R. McCullough .....             | " .....                |
| General Passenger Agent .....                  | William A. Thrall .....               | " .....                |
| General Ticket Agent .....                     | William A. Thrall .....               | " .....                |
| General Superintendent .....                   | Sherburne Sanborn .....               | " .....                |
| Division Superintendent, in Illinois .....     | William A. Gardner .....              | " .....                |
| Division Superintendent, in Illinois .....     | Otto Miller .....                     | " .....                |
| Superintendent of Telegraph .....              | Geo. H. Thayer .....                  | " .....                |
| General Baggage Agent .....                    | Nathaniel A. Phillips .....           | " .....                |
| Land Commissioner .....                        | Charles E. Simmons .....              | " .....                |
| Agent in Illinois, for transfer of stock ..... | J. B. Redfield, Ass't Secretary ..... | " .....                |

## CHICAGO &amp; NORTHERN PACIFIC RAILROAD COMPANY.

## OFFICERS.

| Title.  | Name.                       | Location of Office. |
|---|-----------------------------|---------------------|
| President.....                                | David S. Wegg.....          | Chicago, Ill.....   |
| Vice-President.....                           | James B. Williams.....      | New York, N. Y..... |
| Secretary.....                                | Henry S. Boutell.....       | Chicago, Ill.....   |
| Treasurer.....                                | Geo. S. Barter.....         | New York, N. Y..... |
| Assistant Treasurer.....                      | Conway W. Hillman.....      | Chicago, Ill.....   |
| Cashier.....                                  | William E. Duncombe.....    | ".....              |
| Chief Engineer.....                           | Willis S. Jones.....        | ".....              |
| General Solicitor.....                        | Henry S. Boutell.....       | ".....              |
| Attorney.....                                 | Kemper K. Knapp.....        | ".....              |
| Auditor, General.....                         | James A. Barker.....        | St. Paul, Minn..... |
| Auditor.....                                  | Thomas J. Hyman.....        | Chicago, Ill.....   |
| General Manager.....                          | Andrew A. Allen.....        | ".....              |
| Traffic Manager.....                          | Henry A. Hawley.....        | ".....              |
| General Superintendent.....                   | John T. McBride.....        | ".....              |
| Agent in Illinois, for transfer of stock..... | Henry S. Boutell, Secy..... | ".....              |

## CHICAGO &amp; OHIO RIVER RAILROAD COMPANY.

## OFFICERS.

| Title.                           | Name.                 | Location of Office.    |
|----------------------------------|-----------------------|------------------------|
| Chairman of the Board.....       | Albert N. Parlin..... | Boston, Mass.....      |
| President.....                   | Albert N. Parlin..... | ".....                 |
| Vice-President.....              | Austin Corbin.....    | New York, N. Y.....    |
| Secretary and Treasurer.....     | E. R. Reynolds.....   | ".....                 |
| General Solicitor.....           | C. W. Fairbanks.....  | Indianapolis, Ind..... |
| Auditor.....                     | J. L. Hamar.....      | Kansas, Ill.....       |
| General Manager.....             | J. D. Livingston..... | ".....                 |
| General Freight Agent.....       | F. N. Boyer.....      | Olney, Ill.....        |
| General Passenger Agent.....     | J. D. Livingston..... | Kansas, Ill.....       |
| Asst General Ticket Agent.....   | J. D. Livingston..... | ".....                 |
| General Superintendent.....      | Wm. A. Bell.....      | ".....                 |
| Superintendent of Telegraph..... | C. E. Achuff.....     | ".....                 |

## CHICAGO, BURLINGTON &amp; NORTHERN RAILROAD COMPANY.

## OFFICERS.

| Title.                           | Name.                 | Location of Office.    |
|----------------------------------|-----------------------|------------------------|
| Chairman of the Board.....       | J. Murray Forbes..... | Boston, Mass.....      |
| President.....                   | J. Murray Forbes..... | ".....                 |
| Vice-President.....              | Geo. B. Harris.....   | St. Paul, Minn.....    |
| Secretary.....                   | F. B. Beaumont.....   | Boston, Mass.....      |
| Treasurer.....                   | J. Murray Forbes..... | ".....                 |
| Cashier.....                     | F. Dabney.....        | St. Paul, Minn.....    |
| Chief Engineer.....              | S. D. Purdy.....      | LaCrosse, Wis.....     |
| Attorney or General Counsel..... | Yound & Lightner..... | St. Paul, Minn.....    |
| Auditor.....                     | N. B. Hinkley.....    | St. Paul, Minn.....    |
| General Freight Agent.....       | W. J. C. Kenyon.....  | ".....                 |
| General Passenger Agent.....     | W. J. C. Kenyon.....  | ".....                 |
| General Superintendent.....      | J. R. Hastings.....   | ".....                 |
| Assistant Superintendent.....    | D. Cunningham.....    | LaCrosse, Wis.....     |
| Superintendent.....              | J. C. Howard.....     | Minneapolis, Minn..... |
| Superintendent of Telegraph..... | P. H. Hough.....      | LaCrosse, Wis.....     |
| General Baggage Agent.....       | E. A. Sadd.....       | Chicago, Ill.....      |

## CHICAGO, BURLINGTON &amp; QUINCY RAILROAD COMPANY.

## OFFICERS.

| Title.  | Name.                                       | Location of Office.  |
|---|---|----------------------|
| Chairman of the Board.....                    | J. M. Forbes.....                           | Boston, Mass.....    |
| President.....                                | C. E. Perkins.....                          | Burlington, Ia.....  |
| Vice-President, 1st.....                      | J. C. Peasley.....                          | Chicago, Ill.....    |
| Vice-President, 2d.....                       | Geo. B. Harris.....                         | .....                |
| Secretary.....                                | T. S. Howland.....                          | Boston, Mass.....    |
| Treasurer.....                                | J. C. Peasley.....                          | Chicago, Ill.....    |
| Assistant Treasurer.....                      | E. E. Pratt.....                            | Boston, Mass.....    |
| Cashier, Acting.....                          | W. J. Fabian.....                           | Chicago, Ill.....    |
| Chief Engineer.....                           | E. J. Blake.....                            | .....                |
| Attorney at Chicago.....                      | C. M. Dawes.....                            | .....                |
| Attorney at Galesburg.....                    | O. F. Price.....                            | Galesburg, Ill.....  |
| Comptroller, Acting.....                      | W. J. Ladd.....                             | Boston, Mass.....    |
| Auditor, General.....                         | J. L. Lathrop.....                          | Chicago, Ill.....    |
| Ass't General Auditor.....                    | C. A. turgis.....                           | .....                |
| General Manager.....                          | G. B. Harris.....                           | .....                |
| General Freight Agent.....                    | Thos. Miller.....                           | .....                |
| General Passenger and Ticket Agent.....       | P. S. Eustis.....                           | .....                |
| Ass't General Ticket and Passenger Agt.....   | L. Wakeley.....                             | .....                |
| Ass't General Freight Agents.....             | F. Rogers, E. R. Puffer, W. B. Hamblin..... | .....                |
| General Superintendent.....                   | J. D. Besler.....                           | .....                |
| Division Superintendent.....                  | L. E. Johnson.....                          | Aurora, Ill.....     |
| Division Superintendent.....                  | E. M. Herr.....                             | Galesburg, Ill.....  |
| Division Superintendent.....                  | W. B. Throop.....                           | Beardstown, Ill..... |
| General Supt. of Illinois Lines.....          | F. C. Rice.....                             | Galesburg, Ill.....  |
| Supt. of Freight Terminals at Chicago.....    | C. G. Wilson.....                           | Chicago, Ill.....    |
| Superintendent of Telegraph.....              | W. W. Nichols.....                          | .....                |
| General Baggage Agent.....                    | E. A. Sadd.....                             | .....                |
| Land Commissioner.....                        | W. W. Baldwin.....                          | Burlington, Ia.....  |
| Agent in Illinois, for transfer of stock..... | H. W. Weiss.....                            | Chicago, Ill.....    |

## GALESBURG &amp; RIO RAILROAD COMPANY.

## OFFICERS.

| Title.         | Name.              | Location of Office. |
|----------------|--------------------|---------------------|
| President..... | J. L. Lathrop..... | Chicago, Ill.....   |
| Secretary..... | L. O. Goddard..... | .....               |

## ILLINOIS VALLEY &amp; NORTHERN RAILROAD COMPANY.

## OFFICERS.

| Title.                       | Name.              | Location of Office. |
|------------------------------|--------------------|---------------------|
| President.....               | J. L. Lathrop..... | Chicago, Ill.....   |
| Vice-President.....          | J. C. Osgood.....  | New York, N. Y..... |
| Secretary and Treasurer..... | H. W. Weiss.....   | Chicago, Ill.....   |

## ST. LOUIS, ROCK ISLAND &amp; CHICAGO RAILROAD COMPANY.

## OFFICERS.

| Title.                        | Name.                   | Location of Office. |
|-------------------------------|-------------------------|---------------------|
| President .....               | J. N. A. Griswold ..... | New York, N. Y....  |
| Vice-President .....          | J. L. Lathrop .....     | Chicago, Ill. ....  |
| Secretary and Treasurer ..... | L. O. Goddard .....     | .....               |

## CHICAGO, MILWAUKEE &amp; ST. PAUL RAILWAY COMPANY.

## OFFICERS.

| Title.                            | Name.                    | Location of Office. |
|-----------------------------------|--------------------------|---------------------|
| President .....                   | Roswell Miller .....     | Chicago, Ill. ....  |
| Vice-President, 1st .....         | Frank S. Bond .....      | New York, N. Y....  |
| Vice-President, 3d .....          | E. P. Ripley .....       | Chicago, Ill. ....  |
| President, Assistant to .....     | J. F. Tucker .....       | .....               |
| Secretary .....                   | P. M. Myers .....        | Milwaukee, Wis....  |
| Treasurer .....                   | F. G. Ranney .....       | Chicago, Ill. ....  |
| Assistant Treasurer .....         | Jno. McNab .....         | .....               |
| Cashier .....                     | D. J. Whittemore .....   | .....               |
| General Solicitor .....           | J. Y. Fish .....         | .....               |
| General Counsel .....             | Jno. W. Cary .....       | .....               |
| Comptroller .....                 | E. O. Sewall .....       | .....               |
| Auditor, General .....            | J. P. Whaling .....      | .....               |
| Assistant General Auditor .....   | W. N. D. Winne .....     | .....               |
| General Manager .....             | A. J. Earling .....      | .....               |
| Freight Traffic Manager .....     | A. C. Bird .....         | .....               |
| General Freight Agent .....       | J. H. Hiland .....       | .....               |
| General Passenger Agent .....     | A. V. H. Carpenter ..... | .....               |
| General Ticket Agent .....        | A. V. H. Carpenter ..... | .....               |
| General Superintendent .....      | W. G. Collins .....      | .....               |
| Superintendent of Telegraph ..... | W. J. Fry .....          | Milwaukee, Wis....  |
| General Baggage Agent .....       | W. D. Carrick .....      | .....               |
| Land Commissioner .....           | H. G. Hangan .....       | .....               |

## CHICAGO, PEORIA &amp; ST. LOUIS RAILWAY COMPANY.

## OFFICERS.

| Title.   | Name.                   | Location of Office.   |
|--|-------------------------|-----------------------|
| President .....                                | William S. Hook .....   | Jacksonville, Ill.... |
| Vice-President .....                           | Isaac L. Morrison ..... | .....                 |
| Secretary and Treasurer .....                  | Marcus Hook .....       | .....                 |
| Cashier .....                                  | Francis Hook .....      | .....                 |
| Attorney or General Counsel .....              | Isaac L. Morrison ..... | .....                 |
| Auditor .....                                  | Marcus Hook .....       | .....                 |
| Assistant General Freight Agent .....          | Edward A. Nixon .....   | .....                 |
| General Freight Agent .....                    | W. C. Alvord .....      | Peoria, Ill. ....     |
| General Passenger Agent .....                  | Weston W. Kent .....    | Jacksonville, Ill.... |
| Superintendent .....                           | David W. Rider .....    | .....                 |
| Agent in Illinois, for transfer of stock ..... | Marcus Hook .....       | .....                 |

## CHICAGO, ROCK ISLAND &amp; PACIFIC RAILWAY COMPANY.

## OFFICERS.

| Title.                                       | Name.                            | Location of Office.                    |
|--|----------------------------------|--|
| President .....                              | R. R. Cable.....                 | Chicago, Ill. ....                     |
| Vice-President, 1st .....                    | Benj. Brewster .....             | New York, N. Y. ....                   |
| Vice-President, 2d .....                     | W. G. Purdy.....                 | Chicago, Ill. ....                     |
| Vice-President, 3d .....                     | H. A. Parker.....                | " .....                                |
| Secretary and Treasurer.....                 | W. G. Purdy.....                 | " .....                                |
| Ass't Treasurers and Ass't Secretaries ..    | J. R. Cowing, I. F. Phillips ... | New York, N. Y.,<br>and Chicago, Ill.. |
| Cashier .....                                | F. E. Hayne.....                 | Chicago, Ill. ....                     |
| Assistant to President.....                  | A. Kimball .....                 | Davenport, Ia. ....                    |
| General Counsel.....                         | Thos. F. Withrow .....           | Chicago, Ill. ....                     |
| General Attorney .....                       | Thos. S. Wright .....            | " .....                                |
| General Attorney .....                       | M. A. Low .....                  | Topeka, Kas. ....                      |
| Auditor.....                                 | F. W. Porter.....                | Chicago, Ill. ....                     |
| General Manager.....                         | E. St. John.....                 | " .....                                |
| Traffic Manager .....                        | W. M. Sage.....                  | " .....                                |
| General Freight Agent .....                  | J. M. Johnson.....               | " .....                                |
| Assistant General Freight Agent .....        | H. Gower .....                   | " .....                                |
| General Passenger and Ticket Agent.....      | John Sebastian .....             | " .....                                |
| Ass't Gen'l Passenger and Ticket Agent.....  | S. F. Boyd .....                 | Topeka, Kas. ....                      |
| Assistant General Passenger Agent.....       | Geo. L. Rhodes.....              | Chicago, Ill. ....                     |
| General Superintendent.....                  | H. F. Royce .....                | " .....                                |
| General Superintendent.....                  | W. I. Allen.....                 | Topeka, Kas. ....                      |
| Division Superintendent.....                 | B. H. Chamberlain .....          | Chicago, Ill. ....                     |
| Division Superintendent.....                 | John Givin.....                  | Des Moines, Ia. ....                   |
| Division Superintendent.....                 | C. L. Ewing.....                 | Trenton, Mo. ....                      |
| Division Superintendent.....                 | C. N. Gilmore.....               | Des Moines, Ia. ....                   |
| Division Superintendent.....                 | W. H. Stillwell.....             | Horton, Kan. ....                      |
| Division Superintendent.....                 | W. J. Lawrence.....              | Colorado Springs<br>Colo. ....         |
| Division Superintendent.....                 | C. H. Hubbell.....               | Herington Kas. ....                    |
| General Baggage Agent.....                   | J. D. Marston.....               | Chicago, Ill. ....                     |
| Land Commissioner.....                       | J. L. Drew .....                 | Davenport, Ia. ....                    |
| Agent in Illinois, for transfer of stock.... | W. G. Purdy .....                | Chicago, Ill. ....                     |

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## PEORIA &amp; BUREAU VALLEY RAILROAD COMPANY.

## OFFICERS.

| Title.                                       | Name.                | Location of Office.  |
|--|----------------------|----------------------|
| President .....                              | Jas. B. Cowing.....  | New York, N. Y. .... |
| Secretary .....                              | I. F. Phillips ..... | Chicago, Ill. ....   |
| Treasurer .....                              | Wm. A. Nash .....    | New York, N. Y. .... |
| Agent in Illinois, for transfer of stock.... | I. F. Phillips.....  | Chicago, Ill. ....   |



# CHICAGO, ST. LOUIS & PITTSBURGH RAILROAD COMPANY.

## OFFICERS.

| Title.                                   | Name.                 | Location of Office.  |
|--|-----------------------|----------------------|
| President.....                           | Geo. B. Roberts.....  | Philadelphia, Pa.... |
| Vice-President, 1st.....                 | J. N. McCullough..... | Pittsburgh, Pa....   |
| Vice-President, 2d.....                  | James McCrear.....    | ".....               |
| Vice-President, 3d.....                  | Thos. D. Messler..... | ".....               |
| Secretary.....                           | S. B. Liggett.....    | ".....               |
| Treasurer.....                           | Jno. E. Davidson..... | ".....               |
| Assistant Treasurer.....                 | M. C. Spencer.....    | ".....               |
| Chief Engineer.....                      | M. J. Beckler.....    | ".....               |
| General Counsel.....                     | J. T. Brooks.....     | ".....               |
| Assistant Counsel.....                   | J. J. Brooks.....     | ".....               |
| Comptroller.....                         | Thos. D. Messler..... | ".....               |
| Auditor Freight Receipts.....            | A. McElvey.....       | ".....               |
| Auditor Passenger Receipts.....          | J. P. Farley.....     | ".....               |
| General Manager.....                     | Joseph Wood.....      | ".....               |
| Auditor Disbursements.....               | James Instan.....     | ".....               |
| Gen'l Supt. Transportation.....          | E. B. Taylor.....     | ".....               |
| Purchasing Agent.....                    | Wm. Mullins.....      | ".....               |
| General Freight Agent.....               | Wm. Stewart.....      | ".....               |
| Ass't Gen'l Freight Agent.....           | D. F. McCabe.....     | Columbus, O.....     |
| General Passenger and Ticket Agent.....  | E. A. Ford.....       | Pittsburgh, Pa....   |
| Chief Ass't General Passenger Agent..... | Frank Van Dusen.....  | ".....               |
| General Superintendent.....              | J. F. Miller.....     | Columbus, O.....     |
| Division Superintendent.....             | C. M. Bennett.....    | Logansport, Ind....  |
| Division Superintendent.....             | F. G. Darlington..... | Indianapolis, Ind..  |
| Division Superintendent.....             | W. B. See.....        | Richmond, Ind....    |
| Superintendent of Telegraph.....         | E. C. Bradley.....    | Pittsburgh, Pa....   |
| General Baggage Agent.....               | R. R. Bentley.....    | ".....               |

# ENGLEWOOD CONNECTING RAILWAY COMPANY.

## OFFICERS.

| Title.         | Name.                 | Location of Office. |
|----------------|-----------------------|---------------------|
| President..... | Thos. D. Messler..... | Pittsburgh, Pa....  |
| Secretary..... | S. B. Liggett.....    | ".....              |
| Treasurer..... | Jno. E. Davidson..... | ".....              |

## CHICAGO, ST. PAUL &amp; KANSAS CITY RAILWAY COMPANY.

## OFFICERS.

| Title.                                  | Name.                 | Location of Office.  |
|---|-----------------------|----------------------|
| President .....                         | A. B. Stickney .....  | St. Paul, Minn. .... |
| Vice-President and Transfer Agent ..... | Wm. Lewis Boyle ..... | New York, N. Y. .... |
| Vice-President .....                    | C. W. Benson .....    | St. Paul, Minn. .... |
| Secretary .....                         | M. C. Woodruff .....  | Dubuque, Iowa .....  |
| Treasurer .....                         | W. B. Bend .....      | St. Paul, Minn. .... |
| Assistant Treasurer and Secretary ..... | Jno. L. Platt .....   | " .....              |
| Attorneys or General Counsel .....      | Lusk & Bunn .....     | " .....              |
| Auditor, General .....                  | M. C. Healton .....   | " .....              |
| General Manager .....                   | Jno. M. Egan .....    | " .....              |
| Traffic Manager .....                   | H. Fernstrom .....    | Chicago, Ill. ....   |
| General Freight Agent .....             | P. C. Stohr .....     | " .....              |
| Assistant General Freight Agent .....   | F. H. Tibbitts .....  | " .....              |
| General Passenger Agent .....           | W. R. Busenbark ..... | " .....              |
| General Ticket Agent .....              | W. R. Busenbark ..... | " .....              |
| Assistant General Passenger Agent ..... | F. A. Lord .....      | " .....              |
| General Superintendent .....            | C. Shields .....      | St. Paul, Minn. .... |
| Division Superintendent .....           | J. McGuire .....      | " .....              |
| Division Superintendent .....           | B. F. Egan .....      | Dubuque, Iowa ....   |
| Division Superintendent .....           | J. D. Ferrell .....   | Chicago, Ill. ....   |
| Assistant General Ticket Agent .....    | C. A. Cairns .....    | " .....              |
| Superintendent of Telegraph .....       | J. Berlingett .....   | Des Moines, Iowa ..  |
| General Baggage Agent .....             | John Colley .....     | Chicago, Ill. ....   |
| Land Commissioner .....                 | J. C. Ford .....      | St. Paul, Minn. .... |

## CLEVELAND, CINCINNATI, CHICAGO &amp; ST. LOUIS RAILWAY COMPANY.

## OFFICERS.

| Title.  | Name.   | Location of Office.                        |
|---|---|--|
| President .....                                 | M. E. Ingalls .....                                     | Cincinnati, Ohio...                        |
| Vice-President .....                            | J. D. Layng .....                                       | New York, N. Y. ....                       |
| Secretary .....                                 | E. F. Osborn .....                                      | Cincinnati, Ohio...                        |
| Treasurer .....                                 | G. S. Russell .....                                     | Cleveland, Ohio ...                        |
| Chief Engineer .....                            | W. C. Irwin .....                                       | " .....                                    |
| General Solicitor, Att'y or Gen'l Counsel ..... | J. T. Dye (Ind. & Ill.)<br>H. H. Poppleton (Ohio) ..... | Indianapolis, Ind.<br>Cleveland, Ohio .... |
| Auditor .....                                   | P. A. Hewitt .....                                      | " .....                                    |
| General Manager .....                           | W. M. Green .....                                       | Cincinnati, Ohio...                        |
| Assistant General Manager .....                 | J. A. Barnard .....                                     | Indianapolis, Ind. ...                     |
| Traffic Manager .....                           | G. G. Murray .....                                      | Cincinnati, Ohio...                        |
| Freight Traffic Manager .....                   | E. S. Washburne .....                                   | " .....                                    |
| General Freight Agent .....                     | Edgar Hill .....  | " .....                                    |
| General Passenger Agent .....                   | D. B. Martin .....                                      | " .....                                    |
| General Ticket Agent .....                      | John Egan .....   | " .....                                    |
| General Superintendent .....                    | E. A. Peck .....  | Indianapolis, Ind. ...                     |
| Division Superintendent .....                   | J. W. Simmons .....                                     | Mt. Carmel, Ill. ....                      |
| Division Superintendent .....                   | C. J. Stedwell .....                                    | Cleveland, Ohio...                         |
| Division Superintendent .....                   | J. O. Van Winkle .....                                  | Indianapolis, Ind. ...                     |
| Division Superintendent .....                   | G. W. Bender .....                                      | " .....                                    |
| Division Superintendent .....                   | A. G. Wells .....                                       | " .....                                    |
| Superintendent of Telegraph .....               | T. J. Higgins .....                                     | " .....                                    |
| General Baggage Agent .....                     | D. M. Calkins .....                                     | Cleveland, Ohio...                         |

## PEORIA &amp; EASTERN RAILWAY COMPANY.

## OFFICERS.

| Title.                        | Name.               | Location of Office. |
|-------------------------------|---------------------|---------------------|
| President .....               | J. A. Barnard ..... | Indianapolis, Ind.. |
| Secretary and Treasurer ..... | W. W. Lynn .....    | " ..                |

## KANKAKEE &amp; SENECA RAILROAD COMPANY.

## OFFICERS.

| Title.   | Name.                | Location of Office. |
|--|----------------------|---------------------|
| President .....                                | T. P. Bonfield ..... | Kankakee, Ill ..... |
| Secretary .....                                | E. F. O-born .....   | Cincinnati, O ..... |
| Treasurer .....                                | G. S. Russell .....  | Cleveland, O .....  |
| Auditor .....                                  | P. A. Hewitt .....   | " .....             |
| Agent in Illinois, for transfer of stock ..... | T. P. Bonfield ..... | Kankakee, Ill ..... |

The road is operated for this company by the C. C. C. & St. L. Ry. Co., and its officers and heads of departments are in charge.

## DEPUE, LADD &amp; EASTERN RAILROAD COMPANY.

## OFFICERS.

| Title.                        | Name.                  | Location of Office. |
|-------------------------------|------------------------|---------------------|
| President .....               | Albert L. Sweet .....  | Chicago, Ill .....  |
| Vice President .....          | Wm. S. Cherry .....    | " .....             |
| Secretary and Treasurer ..... | Thomas A. Lemmon ..... | " .....             |

## EAST ST. LOUIS &amp; CARONDELET RAILWAY COMPANY.

## OFFICERS.

| Title.                         | Name.                   | Location of Office.   |
|--------------------------------|-------------------------|-----------------------|
| President .....                | Thomas D. Messler ..... | Pittsburgh, Pa. ....  |
| Secretary .....                | S. B. Liggett .....     | " .....               |
| Treasurer .....                | John E. Davidson .....  | " .....               |
| Cashier .....                  | Geo. K. Thomas .....    | East St. Louis, Ill.. |
| General Superintendent .....   | Jos. Hill .....         | St. Louis, Mo .....   |
| Assistant Superintendent ..... | Geo. K. Thomas .....    | East St. Louis, Ill.. |

# EAST ST. LOUIS CONNECTING RAILWAY COMPANY.

## OFFICERS.

| Title.                                       | Name.                | Location of Office.   |
|--|----------------------|-----------------------|
| President.....                               | John Scullin .....   | St. Louis, Mo.....    |
| Vice-President.....                          | A. C. Church.....    | " .....               |
| Secretary .....                              | S. C. Church.....    | " .....               |
| Treasurer .....                              | H. L. Clark .....    | " .....               |
| Cashier .....                                | Isaac A. Smith.....  | " .....               |
| General Manager.....                         | C. H. Sharman.....   | " .....               |
| General Freight Agent .....                  | W. S. Hodges .....   | " .....               |
| General Agent.....                           | R. N. Bothner.....   | East St. Louis, Ill.. |
| Division Superintendent .....                | Chas. A. Haines..... | " .....               |
| Agent in Illinois, for transfer of stock.... | S. C. Church .....   | " .....               |

# ELECTRIC CITY & ILLINOIS RAILWAY COMPANY.

## OFFICERS.

| Title.                                       | Name.                | Location of Office. |
|--|----------------------|---------------------|
| President.....                               | C. D. McLure.....    | Venice, Ill.....    |
| Vice-President.....                          | L. M. Rumsey .....   | " .....             |
| Secretary .....                              | J. H. Overall .....  | " .....             |
| Treasurer .....                              | P. A. Fusz .....     | St. Louis, Mo.....  |
| Assistant Secretary.....                     | John Greenough ..... | " .....             |
| Chief Engineer .....                         | Robt. Ulone.....     | " .....             |
| General Manager .....                        | H. W. Gays.....      | " .....             |
| Agent in Illinois, for transfer of stock.... | J. H. Overall .....  | Venice, Ill .....   |

# ELGIN, JOLIET & EASTERN RAILWAY COMPANY.

## OFFICERS.

| Title.                                       | Name.                  | Location of Office. |
|--|------------------------|---------------------|
| President.....                               | Samuel Spencer .....   | New York, N. Y....  |
| Vice-President.....                          | Norman Williams.....   | Chicago, Ill.....   |
| Secretary and Treasurer .....                | F. D. Raymond.....     | " .....             |
| General Solicitor.....                       | Arthur D. Wheeler..... | " .....             |
| Auditor .....                                | E. W. Sutton .....     | " .....             |
| Traffic Manager.....                         | H. J. Page .....       | " .....             |
| Superintendent .....                         | G. O. Clinton .....    | Joliet, Ill .....   |
| Agent in Illinois, for transfer of stock.... | F. D. Raymond.....     | Chicago, Ill .....  |

## GARDNER, COAL CITY &amp; NORTHERN RAILWAY COMPANY.

## OFFICERS.

| Title.                            | Name.                          | Location of Office.  |
|-----------------------------------|--------------------------------|----------------------|
| President.....                    | Norman Williams.....           | Chicago, Ill. ....   |
| Vice-President.....               | Samuel Spencer.....            | New York, N. Y. .... |
| Secretary.....                    | Arthur D. Wheeler.....         | Chicago, Ill. ....   |
| Treasurer.....                    | F. D. Raymond.....             | " .....              |
| Attorneys or General Counsel..... | Williams, Holt & Wheeler ..... | " .....              |
| Auditor.....                      | F. W. Sutton .....             | " .....              |

## WAUKEGAN &amp; SOUTHWESTERN RAILWAY COMPANY.

## OFFICERS.

| Title.                    | Name.                         | Location of Office. |
|---------------------------|-------------------------------|---------------------|
| President.....            | Chas. S. Holt.....            | Chicago, Ill. ....  |
| Secretary.....            | Arthur D. Wheeler.....        | " .....             |
| Treasurer.....            | F. D. Raymond.....            | " .....             |
| Attorneys or Counsel..... | Williams, Holt & Wheeler..... | " .....             |
| Auditor.....              | F. W. Sutton .....            | " .....             |

## FULTON COUNTY NARROW GAUGE RAILWAY COMPANY.

## OFFICERS.

| Title.                                   | Name.                | Location of Office.  |
|--|----------------------|----------------------|
| President.....                           | S. H. Mallory.....   | Lewistown, Ill. .... |
| Vice-President.....                      | Henry Phelps.....    | " .....              |
| Secretary.....                           | D. J. Thayer.....    | Chariton, Iowa. .... |
| Treasurer.....                           | F. R. Crocker.....   | " .....              |
| Auditor.....                             | Jno. D. Temple.....  | Lewistown, Ill. .... |
| General Manager.....                     | S. H. Mallory.....   | Chariton, Iowa. .... |
| Gen'l Freight, Passenger and Ticket Agt. | A. C. Atherton ..... | Lewistown, Ill. .... |
| Superintendent.....                      | A. C. Atherton ..... | " .....              |



## GRAND TOWER &amp; CARBONDALE RAILROAD COMPANY.

## OFFICERS.

| Title.                           | Name.                | Location of Office.   |
|----------------------------------|----------------------|-----------------------|
| President.....                   | E. A. Hitchcock..... | St. Louis, Mo .....   |
| Vice-President.....              | O. L. Garrison.....  | St. Louis, Mo .....   |
| Secretary.....                   | J. D. Peters.....    | Murphysboro, Ill..    |
| Treasurer.....                   | O. L. Garrison.....  | St. Louis, Mo .....   |
| Attorney or General Counsel..... | W. W. Barr.....      | Carbondale, Ill. .... |
| Auditor.....                     | J. P. Foster.....    | St. Louis, Mo .....   |
| Traffic Manager.....             | Robt. Bell.....      | St. Louis, Mo .....   |
| Superintendent.....              | J. D. Peters.....    | Murphysboro, Ill..    |

## GRAND TOWER &amp; CAPE GIRARDEAU RAILROAD COMPANY.

## OFFICERS.

| Title.              | Name.                | Location of Office.   |
|---------------------|----------------------|-----------------------|
| President.....      | E. A. Hitchcock..... | St. Louis, Mo .....   |
| Vice-President..... | W. W. Barr.....      | Carbondale, Ill ..... |
| Secretary.....      | J. D. Peters.....    | Murphysboro, Ill..    |
| Treasurer.....      | O. L. Garrison.....  | St. Louis, Mo .....   |
| Counsel.....        | W. W. Barr.....      | Carbondale, Ill. .... |
| Auditor.....        | J. P. Foster.....    | St. Louis, Mo .....   |
| Superintendent..... | J. D. Peters.....    | Murphysboro, Ill..    |

## ILLINOIS CENTRAL RAILROAD COMPANY.

## OFFICERS.

| Title.                                       | Name.                         | Location of Office.    |
|--|-------------------------------|------------------------|
| President.....                               | Stuyvesant Fish.....          | Chicago, Ill. ....     |
| Vice-President.....                          | E. H. Harriman.....           | New York, N. Y. ....   |
| Secretary.....                               | A. G. Hackstaff.....          | New York, N. Y. ....   |
| Treasurer.....                               | H. De Wolf.....               | Chicago, Ill. ....     |
| Assistant Treasurer.....                     | E. T. H. Gibson.....          | New York, N. Y. ....   |
| Local Treasurer.....                         | R. S. Charles.....            | New Orleans, La. ...   |
| Chief Engineer.....                          | L. T. Moore.....              | Chicago, Ill. ....     |
| General Counsel.....                         | B. F. Ayer.....               | " .....                |
| General Solicitor.....                       | Jas. Fentress.....            | " .....                |
| Comptroller.....                             | J. C. Welling.....            | " .....                |
| Auditor of Freight Receipts.....             | F. Fairman.....               | " .....                |
| Assistant Auditor of Freight Receipts.....   | J. F. Tibus.....              | " .....                |
| General Manager.....                         | C. A. Beck.....               | " .....                |
| Auditor of Passenger Receipts.....           | A. D. Joslin.....             | " .....                |
| Auditor of Disbursements.....                | Isaac Anderson.....           | " .....                |
| Traffic Manager.....                         | T. J. Hudson.....             | " .....                |
| Assistant Traffic Manager.....               | M. C. Markham.....            | " .....                |
| General Freight Agent.....                   | Horace Tucker.....            | " .....                |
| General Passenger Agent.....                 | A. H. Hanson.....             | " .....                |
| Assistant General Freight Agent.....         | W. E. Keepers.....            | " .....                |
| General Superintendent.....                  | A. W. Sullivan.....           | " .....                |
| Division Superintendent.....                 | J. G. Hardigan.....           | Cairo, Ill. ....       |
| Acting Division Superintendent.....          | J. C. Jacobs.....             | Amboy, Ill. ....       |
| Acting Division Superintendent.....          | D. S. Bailey.....             | Rockford, Ill. ....    |
| Acting Division Superintendent.....          | G. W. Hatter.....             | Springfield, Ill. .... |
| Division Superintendent.....                 | H. L. Frisbie.....            | Pontiac, Ill. ....     |
| Sup't of Telegraph (Northern lines).....     | C. S. Jones.....              | Chicago, Ill. ....     |
| Superintendent of Car Service.....           | E. M. Horton.....             | " .....                |
| Superintendent of Machinery.....             | H. Schlacks.....              | " .....                |
| General Baggage Agent.....                   | H. A. Winker.....             | " .....                |
| Land Commissioner.....                       | L. P. Morehouse.....          | " .....                |
| Agent in Illinois, for transfer of stock.... | John Dunn, Assistant Sec'y .. | " .....                |

## CHICAGO, HAVANA &amp; WESTERN RAILROAD COMPANY.

## OFFICERS.

| Title.               | Name.                | Location of Office. |
|----------------------|----------------------|---------------------|
| President .....      | Stuyvesant Fish..... | Chicago, Ill.....   |
| Vice-President ..... | E. H. Harriman.....  | New York, N. Y....  |
| Secretary .....      | W. G. Bruen.....     | Chicago, Ill.....   |
| Treasurer .....      | Henry De Wolf .....  | " .....             |
| Comptroller .....    | J. C. Welling.....   | " .....             |

## CHICAGO, MADISON &amp; NORTHERN RAILROAD COMPANY.

## OFFICERS.

| Title.               | Name.                | Location of Office. |
|----------------------|----------------------|---------------------|
| President .....      | Stuyvesant Fish..... | Chicago, Ill.....   |
| Vice-President ..... | E. H. Harriman.....  | New York, N. Y....  |
| Secretary .....      | W. G. Bruen.....     | Chicago, Ill.....   |
| Treasurer .....      | Henry De Wolf .....  | " .....             |
| Comptroller .....    | J. C. Welling.....   | " .....             |

## CHICAGO &amp; SPRINGFIELD RAILROAD COMPANY.

## OFFICERS.

| Title.               | Name.                | Location of Office. |
|----------------------|----------------------|---------------------|
| President .....      | Stuyvesant Fish..... | Chicago, Ill.....   |
| Vice-President ..... | E. H. Harriman.....  | New York, N. Y....  |
| Secretary .....      | W. G. Bruen.....     | Chicago, Ill.....   |
| Treasurer .....      | Henry De Wolf .....  | " .....             |
| Comptroller .....    | J. C. Welling.....   | " .....             |

## KANKAKEE &amp; SOUTHWESTERN RAILROAD COMPANY.

## OFFICERS.

| Title.               | Name.                | Location of Office. |
|----------------------|----------------------|---------------------|
| President .....      | Stuyvesant Fish..... | Chicago, Ill.....   |
| Vice-President ..... | E. H. Harriman.....  | New York, N. Y....  |
| Secretary .....      | W. G. Bruen.....     | Chicago, Ill.....   |
| Treasurer .....      | Henry DeWolf.....    | " .....             |
| Comptroller .....    | J. C. Welling .....  | " .....             |

## RANTOUL RAILROAD COMPANY.

## OFFICERS.

| Title.              | Name.                | Location of Office. |
|---------------------|----------------------|---------------------|
| President.....      | Stuyvesant Fish..... | Chicago, Ill.....   |
| Vice-President..... | E. H. Harriman.....  | New York, N. Y....  |
| Secretary.....      | W. G. Bruen.....     | Chicago, Ill.....   |
| Treasurer.....      | Henry DeWolf.....    | ".....              |
| Comptroller.....    | J. C. Welling.....   | ".....              |

## SOUTH CHICAGO RAILROAD COMPANY.

## OFFICERS.

| Title.              | Name.                | Location of Office. |
|---------------------|----------------------|---------------------|
| President.....      | Stuyvesant Fish..... | Chicago, Ill.....   |
| Vice-President..... | E. H. Harriman.....  | New York, N. Y....  |
| Secretary.....      | W. G. Bruen.....     | Chicago, Ill.....   |
| Treasurer.....      | Henry DeWolf.....    | ".....              |
| Comptroller.....    | J. C. Welling.....   | ".....              |

## INDIANA &amp; ILLINOIS SOUTHERN RAILROAD COMPANY.

## OFFICERS.

| Title.   | Name.                  | Location of Office. |
|--|------------------------|---------------------|
| President.....                                   | W. H. Alley.....       | Chicago, Ill.....   |
| Vice-President.....                              | John B. Lyon.....      | ".....              |
| Secretary.....                                   | P. H. Blue.....        | Sullivan, Ind.....  |
| Treasurer.....                                   | M. B. Wilson.....      | ".....              |
| Consulting Engineer.....                         | A. B. Fitch.....       | Terre Haute, Ind..  |
| General Solicitor.....                           | John S. Cooper.....    | Chicago, Ill.....   |
| Assistant Solicitor.....                         | John T. Hays.....      | Sullivan, Ind.....  |
| Auditor.....                                     | C. R. Hinkle.....      | ".....              |
| General Manager.....                             | P. H. Blue.....        | ".....              |
| General Freight, Passenger and Ticket Agent..... | F. E. Basler.....      | ".....              |
| Train Master.....                                | W. R. Battenfield..... | ".....              |
| Road Master.....                                 | James Hoskins.....     | ".....              |
| Master Mechanic.....                             | M. E. Hotchkiss.....   | Palestine, Ill..... |

# INDIANAPOLIS, DECATUR & WESTERN RAILWAY COMPANY.

## OFFICERS.

| Title.                       | Name.                    | Location of Office. |
|------------------------------|--------------------------|---------------------|
| President.....               | Henry B. Hammond .....   | New York, N. Y....  |
| Secretary and Treasurer..... | Thos. Batkins .....      | " .....             |
| General Solicitor.....       | Robt. B. F. Pierce ..... | Indianapolis, Ind.. |
| Auditor .....                | J. V. McNeal .....       | " .....             |
| General Freight Agent .....  | Jno. S. Lazarus.....     | " .....             |
| General Ticket Agent.....    | Jno. S. Lazarus.....     | " .....             |
| Superintendent.....          | L. A. Boyd.....          | " .....             |
| General Baggage Agent.....   | Jno. S. Lazarus.....     | " .....             |

# INDIANA, ILLINOIS & IOWA RAILROAD COMPANY.

## OFFICERS.

| Title.                                 | Name.               | Location of Office.   |
|--|---------------------|-----------------------|
| President.....                         | F. M. Drake .....   | Centerville, Ia. .... |
| Vice-President.....                    | Geo. H. Holt .....  | New York, N. Y....    |
| Secretary and Treasurer .....          | Jno. A. Drake ..... | Chicago, Ill. ....    |
| General Solicitor.....                 | H. K. Wheeler.....  | Kankakee, Ill. ....   |
| Auditor .....                          | M. J. Hartnett..... | " .....               |
| General Manager.....                   | T. P. Shonts.....   | Chicago, Ill. ....    |
| Gen'l Freight and Passenger Agent..... | C. W. Cook .....    | " .....               |
| Superintendent .....                   | C. H. Smith.....    | Kankakee, Ill. ....   |

# IOWA CENTRAL RAILWAY COMPANY.

## OFFICERS.

| Title.                                  | Name.               | Location of Office. |
|---|---------------------|---------------------|
| Chairman of the Board .....             | Russell Sage.....   | New York, N. Y....  |
| President.....                          | Russell Sage.....   | " .....             |
| Vice-President.....                     | H. J. Morse.....    | " .....             |
| Secretary .....                         | Geo. R. Morse.....  | " .....             |
| Treasurer .....                         | E. H. Perkins ..... | " .....             |
| Assistant Treasurer.....                | Geo. R. Morse.....  | " .....             |
| Local Treasurer .....                   | Seth Zug.....       | Marshalltown, Ia. . |
| Chief Engineer.....                     | G. E. Pruden.....   | " .....             |
| General Solicitor .....                 | A. C. Daly .....    | " .....             |
| Auditor .....                           | C. S. Benson.....   | " .....             |
| General Manager.....                    | C. H. Aekert.....   | " .....             |
| Traffic Manager .....                   | A. F. Banks.....    | " .....             |
| Assistant General Passenger Agent ..... | T. P. Barry .....   | " .....             |
| Assistant General Freight Agent.....    | Jas. Mahoney.....   | " .....             |
| Superintendent .....                    | J. H. Redmon.....   | " .....             |
| Superintendent of Telegraph .....       | G. N. Gish.....     | " .....             |

## LAKE ERIE &amp; WESTERN RAILROAD COMPANY.

## OFFICERS.

| Title.                                 | Name.                  | Location of Office. |
|--|------------------------|---------------------|
| Chairman of the Board .....            | Calvin S. Brice .....  | New York, N. Y....  |
| President .....                        | Calvin S. Brice .....  | " " .....           |
| Vice President .....                   | Nelson Robinson .....  | " " .....           |
| Secretary and Treasurer .....          | L. M. Schwan .....     | " " .....           |
| Assistant Treasurer .....              | A. D. Thomas .....     | Indianapolis, Ind.. |
| Chief Engineer .....                   | F. H. Perry .....      | " " .....           |
| Attorney or General Counsel .....      | W. E. Hackedorn .....  | " " .....           |
| Assistant Attorney or General Counsel. | F. S. Foote .....      | " " .....           |
| Auditor .....                          | W. A. Wildhack .....   | " " .....           |
| General Manager .....                  | Geo. L. Bradbury ..... | " " .....           |
| Traffic Manager .....                  | H. C. Parker .....     | " " .....           |
| Assistant General Freight Agent .....  | S. A. Weikel .....     | " " .....           |
| Assistant General Freight Agent .....  | S. B. Sweet .....      | " " .....           |
| General Passenger Agent .....          | C. F. Daly .....       | " " .....           |
| General Ticket Agent .....             | C. F. Daly .....       | " " .....           |
| General Superintendent .....           | D. S. Hill .....       | " " .....           |
| Master of Transportation and Superin-  | O. W. Bell .....       | " " .....           |
| tendent of Telegraph .....             | C. F. Daly .....       | " " .....           |
| General Baggage Agent .....            | C. F. Daly .....       | " " .....           |

LAKE SHORE & MICHIGAN SOUTHERN RAILWAY COM-  
PANY.

## OFFICERS.

| Title.                                  | Name.                      | Location of Office.   |
|---|----------------------------|-----------------------|
| Chairman of the B and .....             | Wm. K. Vanderbilt .....    | New York, N. Y....    |
| President .....                         | John Newell .....          | Cleveland, Ohio....   |
| Vice-President .....                    | E. D. Worcester .....      | New York, N. Y....    |
| Secretary and Treasurer .....           | E. D. Worcester .....      | " " .....             |
| Assistant Treasurer .....               | D. W. Pardee .....         | " " .....             |
| Local Treasurer .....                   | N. Bartlett .....          | Cleveland, Ohio....   |
| Chief Engineer .....                    | G. H. Kimball .....        | " " .....             |
| Attorney or General Counsel .....       | Geo. C. Greene .....       | " " .....             |
| Assistant Attorney or General Counsel.. | O. G. Gettyen-Danner ..... | " " .....             |
| Auditor, General .....                  | Cyrus P. Leland .....      | " " .....             |
| General Manager .....                   | John Newell .....          | " " .....             |
| General Freight Agent .....             | John T. R. McKay .....     | " " .....             |
| Assistant General Freight Agent .....   | James G. James .....       | " " .....             |
| Assistant General Passenger Agent ..... | E. C. Luce .....           | " " .....             |
| General Passenger Agent .....           | A. J. Smith .....          | " " .....             |
| General Ticket Agent .....              | A. J. Smith .....          | " " .....             |
| Assistant General Ticket Agent .....    | E. C. Luce .....           | " " .....             |
| General Superintendent .....            | Phineas P. Wright .....    | " " .....             |
| Assistant General Superintendent .....  | W. H. Canniff .....        | " " .....             |
| Division Superintendent .....           | C. B. Couch .....          | " " .....             |
| Division Superintendent .....           | Thomas Flesher, Jr. ....   | " " .....             |
| Division Superintendent .....           | T. J. Charlesworth .....   | Toledo, Ohio .....    |
| Division Superintendent .....           | A. G. Amnden .....         | Chicago, Ill. ....    |
| Division Superintendent .....           | T. W. Niles .....          | Youngstown, Ohio..    |
| Division Superintendent .....           | S. S. Hand .....           | Detroit, Mich. ....   |
| Division Superintendent .....           | T. F. Whittelsey .....     | Hillsdale, Mich. .... |
| Superintendent of Telegraph .....       | Wm. Kline .....            | Toledo, Ohio .....    |
| General Baggage Agent .....             | John L. Freeman .....      | Cleveland, Ohio....   |



## LOUISVILLE &amp; NASHVILLE RAILROAD COMPANY.

## OFFICERS.

| Title.                                  | Name.                  | Location of Office. |
|---|------------------------|---------------------|
| President .....                         | Eckstein Norton .....  | New York, N. Y....  |
| Vice-President .....                    | Milton H. Smith .....  | Louisville, Ky....  |
| Vice-President, 2d .....                | A. M. Quarrier .....   | " " .....           |
| Vice-President, 3d .....                | E. B. Stahlman .....   | Nashville, Tenn.... |
| Secretary .....                         | J. H. Ellis .....      | Louisville, Ky....  |
| Treasurer .....                         | Wm. W. Thompson .....  | " " .....           |
| Assistant Treasurer .....               | S. H. Edgar .....      | " " .....           |
| Cashier .....                           | G. W. Proctor .....    | " " .....           |
| Chief Attorney .....                    | Russell Houston .....  | " " .....           |
| Comptroller .....                       | Cushman Quarrier ..... | " " .....           |
| Assistant Comptroller .....             | Charles Haydon .....   | " " .....           |
| General Manager .....                   | J. G. Metcalfe .....   | " " .....           |
| Chief Engineer .....                    | R. Montfort .....      | " " .....           |
| Traffic Manager .....                   | S. R. Knott .....      | " " .....           |
| General Freight Agent .....             | John M. Culp .....     | " " .....           |
| Assistant General Freight Agent .....   | P. J. McGovern .....   | " " .....           |
| General Passenger Agent .....           | C. P. Atmore .....     | " " .....           |
| Assistant General Passenger Agent ..... | J. A. Boyd .....       | " " .....           |
| General Baggage Agent .....             | J. B. Browning .....   | " " .....           |
| Division Superintendent .....           | B. F. Dickson .....    | Evansville, Ind.... |

## SOUTHEAST &amp; ST. LOUIS RAILWAY COMPANY.

## OFFICERS.

| Title.                       | Name.                | Location of Office. |
|------------------------------|----------------------|---------------------|
| President .....              | M. H. Smith .....    | Louisville, Ky....  |
| Secretary .....              | J. H. Ellis .....    | " " .....           |
| Treasurer .....              | W. W. Thompson ..... | " " .....           |
| Comptroller .....            | C. Quarrier .....    | " " .....           |
| General Manager .....        | J. G. Metcalfe ..... | " " .....           |
| Traffic Manager .....        | S. R. Knott .....    | " " .....           |
| General Superintendent ..... | B. F. Dickson .....  | Evansville, Ind.... |

## LOUISVILLE, EVANSVILLE &amp; ST. LOUIS CONSOLIDATED RAILROAD COMPANY.

## OFFICERS.

| Title.                                 | Name.                     | Location of Office. |
|--|---------------------------|---------------------|
| President .....                        | D. J. Mackey .....        | Evansville, Ind.... |
| Vice-President .....                   | Wm. Heilman .....         | " " .....           |
| Secretary and Treasurer .....          | W. J. Lewis .....         | " " .....           |
| Chief Engineer .....                   | Theo. L. Dunn .....       | New Albany, Ind.... |
| Attorneys or General Counsel .....     | Ingleheart & Taylor ..... | Evansville, Ind.... |
| Auditor .....                          | E. B. Cooke .....         | " " .....           |
| General Manager .....                  | Geo. F. Evans .....       | Louisville, Ky....  |
| General Traffic Manager .....          | G. J. Grammer .....       | Evansville, Ind.... |
| General Passenger Agent .....          | J. S. Odiorne .....       | Louisville, Ky....  |
| General Freight Agent .....            | L. S. Parsons .....       | " " .....           |
| Superintendent of Transportation ..... | Geo. K. Lowell .....      | New Albany, Ind.... |
| General Baggage Agent .....            | F. R. Wheeler .....       | Evansville, Ind.... |

# LOUISVILLE, NEW ALBANY & CHICAGO RAILWAY COMPANY.

## OFFICERS.

| Title.                                  | Name.                      | Location of Office.    |
|---|----------------------------|------------------------|
| President.....                          | Wm. L. Breyfogle.....      | Chicago, Ill.....      |
| Vice-President.....                     | Geo. F. Postelthwaite..... | ".....                 |
| Vice-President.....                     | Hiram W. Hunt.....         | ".....                 |
| Secretary and Treasurer.....            | W. H. Lewis.....           | ".....                 |
| Assistant Treasurer and Secretary.....  | John A. Hilton.....        | New York, N. Y.....    |
| Chief Engineer.....                     | Ferd Hall.....             | Chicago, Ill.....      |
| General Solicitor.....                  | E. C. Field.....           | ".....                 |
| Auditor.....                            | H. H. Kendrick.....        | ".....                 |
| General Manager.....                    | W. F. Black.....           | ".....                 |
| Traffic Manager.....                    | W. H. McDoel.....          | ".....                 |
| General Freight Agent.....              | R. M. Arnold.....          | ".....                 |
| General Passenger and Ticket Agent..... | James Barker.....          | ".....                 |
| Division Superintendent.....            | J. B. Safford.....         | Indianapolis, Ind..... |
| Division Superintendent.....            | J. O. Ewan.....            | Lafayette, Ind.....    |
| Superintendent of Telegraph.....        | F. G. McCurdy.....         | Chicago, Ill.....      |
| General Baggage Agent.....              | James Barker.....          | ".....                 |

# MICHIGAN CENTRAL RAILROAD COMPANY.

## OFFICERS.

| Title.                                       | Name.                   | Location of Office. |
|--|-------------------------|---------------------|
| President.....                               | H. B. Ledyard.....      | Detroit, Mich.....  |
| Vice-President.....                          | E. D. Worcester.....    | New York, N. Y..... |
| Secretary.....                               | E. D. Worcester.....    | ".....              |
| Treasurer.....                               | Henry Pratt.....        | ".....              |
| Cashier.....                                 | John E. Griffiths.....  | Detroit, Mich.....  |
| Chief Engineer.....                          | J. D. Hawks.....        | ".....              |
| General Counsel.....                         | Ashley Pond.....        | ".....              |
| General Attorney.....                        | Henry Russel.....       | ".....              |
| Auditor.....                                 | D. A. Waterman.....     | ".....              |
| Assistant Auditor.....                       | A. J. Burt.....         | ".....              |
| General Manager.....                         | H. B. Ledyard.....      | ".....              |
| General Freight Agent.....                   | A. Mackay.....          | Chicago, Ill.....   |
| Assistant General Freight Agent.....         | B. E. Hand.....         | ".....              |
| General Passenger and Ticket Agent.....      | O. W. Ruggles.....      | ".....              |
| Ass't General Passenger and Ticket Ag't..... | G. E. King.....         | ".....              |
| General Superintendent.....                  | E. C. Brown.....        | Detroit, Mich.....  |
| Assistant General Superintendent.....        | Robt. Miller.....       | ".....              |
| Division Superintendent.....                 | R. H. L. Hommedieu..... | Chicago, Ill.....   |
| Division Superintendent.....                 | C. B. Bush.....         | Jackson, Mich.....  |
| Division Superintendent.....                 | W. J. Martin.....       | Bay City, Mich..... |
| Division Superintendent.....                 | D. S. Sutherland.....   | Detroit, Mich.....  |
| Superintendent of Telegraph.....             | C. E. Torrey.....       | ".....              |
| General Baggage Agent.....                   | C. P. Dearing.....      | ".....              |

## JOLIET &amp; NORTHERN INDIANA RAILROAD COMPANY.

## OFFICERS.

| Title.              | Name.                | Location of Office. |
|---------------------|----------------------|---------------------|
| President.....      | C. Vanderbilt.....   | New York, N. Y....  |
| Vice-President..... | H. B. Ledyard.....   | Detroit, Mich.....  |
| Secretary.....      | E. D. Worcester..... | New York, N. Y....  |
| Treasurer.....      | Henry Pratt.....     | .....               |

## MOBILE &amp; OHIO RAILROAD COMPANY.

## OFFICERS.

| Title.                           | Name.                  | Location of Office. |
|----------------------------------|------------------------|---------------------|
| Chairman of the Board.....       | Wm. Butler Duncan..... | New York, N. Y....  |
| President.....                   | J. C. Clarke.....      | Mobile, Ala.....    |
| Vice-President.....              | Jas. H. Fay.....       | New York, N. Y....  |
| Secretary and Treasurer.....     | Henry Tacon.....       | Mobile, Ala.....    |
| Assistant Secretary.....         | A. Mackintosh.....     | New York, N. Y....  |
| Cashier.....                     | C. M. Shepard.....     | Mobile, Ala.....    |
| General Solicitor.....           | E. L. Russell.....     | " ".....            |
| Auditor, General.....            | R. V. Taylor.....      | " ".....            |
| General Manager.....             | J. C. Clarke.....      | " ".....            |
| Traffic Manager.....             | H. S. Depew.....       | St. Louis, Mo.....  |
| General Passenger Agent.....     | G. W. King.....        | Mobile, Ala.....    |
| General Freight Agent.....       | J. T. Poe.....         | St. Louis, Mo.....  |
| General Superintendent.....      | D. McLaren.....        | Mobile, Ala.....    |
| Division Superintendent.....     | C. S. Clarke.....      | " ".....            |
| Division Superintendent.....     | J. H. Seale.....       | Jackson, Tenn.....  |
| Division Superintendent.....     | H. W. Clarke.....      | Murphysboro, Ill..  |
| Superintendent of Machinery..... | M. T. Carson.....      | Jackson, Tenn.....  |
| Superintendent of Telegraph..... | K. McKenzie.....       | .....               |

## NEW YORK, CHICAGO &amp; ST. LOUIS RAILROAD COMPANY.

## OFFICERS.

| Title.                             | Name.                    | Location of Office. |
|------------------------------------|--------------------------|---------------------|
| Chairman of the Board.....         | Wm. K. Vanderbilt.....   | New York, N. Y....  |
| President.....                     | D. W. Caldwell.....      | Cleveland, Ohio.... |
| Secretary and Treasurer.....       | Allyn Cox.....           | New York, N. Y....  |
| Assistant Treasurer.....           | H. Hammersley.....       | Cleveland, Ohio.... |
| Attorney, General, or Counsel..... | Sam'l E. Williamson..... | " ".....            |
| Auditor.....                       | James P. Curry.....      | " ".....            |
| General Passenger Agent.....       | B. F. Horner.....        | " ".....            |
| General Freight Agent.....         | S. B. Spriggs.....       | " ".....            |
| General Superintendent.....        | Lewis Williams.....      | " ".....            |
| Division Superintendent.....       | A. W. Johnston.....      | " ".....            |
| Division Superintendent.....       | C. D. Gorham.....        | Fort Wayne, Ind.... |
| Superintendent of Telegraph.....   | Geo. T. Williams.....    | Cleveland, Ohio.... |

## CHICAGO &amp; STATE LINE RAILROAD COMPANY.

## OFFICERS.

| Title.                                      | Name.                   | Location of Office.  |
|---|-------------------------|----------------------|
| President .....                             | John Newell.....        | Chicago, Ill.....    |
| Vice-President.....                         | James A. Roosevelt..... | New York, N. Y.....  |
| Secretary .....                             | James P. Curry.....     | Cleveland, Ohio..... |
| Treasurer .....                             | H. Hammersley.....      | " .....              |
| Auditor .....                               | James P. Curry.....     | " .....              |
| Agent in Illinois, for transfer of stock... | W. G. Purdy.....        | Chicago, Ill.....    |

## OHIO &amp; MISSISSIPPI RAILWAY COMPANY.

## OFFICERS.

| Title.                                      | Name.                    | Location of Office.   |
|---|--------------------------|-----------------------|
| President .....                             | J. F. Barnard.....       | Cincinnati, Ohio....  |
| Secretary .....                             | E. P. Cutter.....        | " .....               |
| Treasurer .....                             | Robt. Reid.....          | " .....               |
| Chief Engineer .....                        | C. C. Chandler .....     | " .....               |
| General Solicitors.....                     | Ramsey, Maxwell & Ramsey | " .....               |
| Auditor .....                               | E. P. Cutter.....        | " .....               |
| General Manager .....                       | J. F. Barnard .....      | " .....               |
| General Passenger Agent.....                | W. B. Shattuc.....       | " .....               |
| General Freight Agent.....                  | Wm. Duncan.....          | St. Louis, Mo.....    |
| Superintendent .....                        | C. C. F. Bent.....       | Cincinnati, Ohio....  |
| Assistant Superintendent.....               | C. M. Stanton.....       | Springfield, Ill..... |
| Superintendent of Telegraph.....            | A. Hayward.....          | Cincinnati, Ohio....  |
| General Baggage Agent.....                  | W. I. Robinson.....      | " .....               |
| Agent in Illinois, for transfer of stock... | F. W. Tracy.....         | Springfield, Ill..... |

## PAWNEE RAILROAD COMPANY.

## OFFICERS.

| Title.                            | Name.                  | Location of Office.   |
|-----------------------------------|------------------------|-----------------------|
| Chairman of the Board .....       | John White .....       | Pawnee, Ill.....      |
| President .....                   | John White .....       | " .....               |
| Vice-President.....               | H. B. Davis .....      | " .....               |
| Secretary .....                   | C. E. Clayton .....    | " .....               |
| Treasurer .....                   | H. B. Davis .....      | " .....               |
| Chief Engineer.....               | Joseph E. Burtie ..... | " .....               |
| Attorneys or General Counsel..... | Conkling & Grout.....  | Springfield, Ill..... |
| Auditor .....                     | C. E. Clayton .....    | Pawnee, Ill.....      |
| General Manager.....              | H. B. Davis .....      | " .....               |
| General Freight Agent .....       | H. E. Farman.....      | " .....               |
| General Ticket Agent.....         | H. E. Farman.....      | " .....               |
| Superintendent of Express .....   | H. E. Farman.....      | " .....               |

## PENNSYLVANIA COMPANY.

## OFFICERS.

| Title.                                     | Name.                   | Location of Office. |
|--|-------------------------|---------------------|
| President .....                            | George B. Roberts ..... | Philadelphia, Pa... |
| Vice-President, 1st .....                  | J. N. McCullough .....  | Pittsburgh, Pa....  |
| Vice-President, 2d .....                   | James McCrear .....     | " .....             |
| Vice-President, 3d .....                   | Thomas D. Messler ..... | " .....             |
| Secretary .....                            | S. B. Liggett .....     | " .....             |
| Assistant Secretary .....                  | S. W. White .....       | Philadelphia, Pa... |
| Treasurer .....                            | John E. Davidson .....  | Pittsburgh, Pa....  |
| Assistant Treasurer .....                  | J. P. Henderson .....   | " .....             |
| Chief Engineer .....                       | Thomas Rodd .....       | " .....             |
| General Counsel .....                      | J. F. Brooks .....      | " .....             |
| Assistant Counsel .....                    | J. J. Brooks .....      | " .....             |
| Comptroller .....                          | Thomas D. Messler ..... | " .....             |
| Auditor of Freight Receipts .....          | A. McElvey .....        | " .....             |
| Auditor of Passenger Receipts .....        | J. P. Farley .....      | " .....             |
| Auditor of Disbursements .....             | James Instan .....      | " .....             |
| Assistant Comptroller .....                | John W. Renner .....    | " .....             |
| General Manager .....                      | Joseph Wood .....       | " .....             |
| Purchasing Agent .....                     | William Mullins .....   | " .....             |
| General Freight Agent .....                | William Stewart .....   | " .....             |
| Assistant General Freight Agent .....      | L. C. Cole .....        | " .....             |
| General Passenger and Ticket Agent .....   | E. A. Ford .....        | " .....             |
| Assistant General Passenger Agent .....    | F. VanDusen .....       | " .....             |
| General Supt of Transportation .....       | E. B. Taylor .....      | " .....             |
| General Superintendent .....               | Charles Watts .....     | " .....             |
| Division Superintendent, W. division ..... | C. D. Law .....         | Ft. Wayne, Ind....  |
| Superintendent of Telegraph .....          | E. C. Bradley .....     | Pittsburgh, Pa....  |
| General Baggage Agent .....                | R. R. Bentley .....     | " .....             |

## CALUMET RIVER RAILROAD COMPANY.

## OFFICERS.

| Title.          | Name.                   | Location of Office. |
|-----------------|-------------------------|---------------------|
| President ..... | Thomas D. Messler ..... | Pittsburgh, Pa....  |
| Secretary ..... | S. B. Liggett .....     | " .....             |
| Treasurer ..... | John E. Davidson .....  | " .....             |

PITTSBURGH, FT. WAYNE & CHICAGO RAILWAY  
COMPANY.

## OFFICERS.

| Title.                            | Name.                | Location of Office. |
|-----------------------------------|----------------------|---------------------|
| President .....                   | Louis H. Meyer ..... | New York, N. Y....  |
| Secretary and Treasurer .....     | John J. Haley .....  | Pittsburgh, Pa....  |
| Attorney or General Counsel ..... | Chas. W. Cass .....  | New York, N. Y....  |



## SOUTH CHICAGO &amp; SOUTHERN RAILROAD COMPANY.

## OFFICERS.

| Title.          | Name.                  | Location of Office.  |
|-----------------|------------------------|----------------------|
| President ..... | T. D. Messler .....    | Pittsburgh, Pa. .... |
| Secretary ..... | S. B. Liggett .....    | " .....              |
| Treasurer ..... | Jno. E. Davidson ..... | " .....              |

## PEORIA &amp; PEKIN UNION RAILWAY COMPANY.

## OFFICERS.

| Title.                                       | Name.                     | Location of Office.     |
|--|---------------------------|-------------------------|
| President .....                              | Jos. Ramsey, Jr. ....     | Cincinnati, Ohio. ...   |
| Vice-President .....                         | Wm. S. Hook .....         | Jacksonville, Ill. .... |
| Secretary and Treasurer .....                | H. K. Pinkney .....       | Peoria, Ill. ....       |
| Chief Engineer .....                         | Jas. E. Palmer .....      | " .....                 |
| General Solicitors .....                     | Stevens & Horton .....    | " .....                 |
| Auditor .....                                | P. T. Dwight .....        | " .....                 |
| General Superintendent .....                 | M. S. Connors .....       | " .....                 |
| General Freight Agent .....                  | M. S. Connors .....       | " .....                 |
| Superintendent of Telegraph .....            | J. H. Morrison .....      | " .....                 |
| Agent in Illinois, for transfer of stock ... | H. K. Pinkney, Secy. .... | " .....                 |

## PEORIA, DECATUR &amp; EVANSVILLE RAILWAY COMPANY.

## OFFICERS.

| Title.                                  | Name.                | Location of Office.   |
|---|----------------------|-----------------------|
| President .....                         | D. J. Mackey .....   | Evansville, Ind. .... |
| Vice-President .....                    | Wm. Heilman .....    | " .....               |
| Secretary and Treasurer .....           | W. J. Lewis .....    | " .....               |
| Chief Engineer .....                    | T. A. Allen .....    | " .....               |
| Attorney or General Counsel .....       | J. S. Stevens .....  | Peoria, Ill. ....     |
| Auditor .....                           | E. B. Cooke .....    | Evansville, Ind. .... |
| General Manager .....                   | Geo. W. Saul .....   | Chicago, Ill. ....    |
| General Traffic Manager .....           | G. J. Grammer .....  | Evansville, Ind. .... |
| General Freight Agent .....             | E. O. Hopkins .....  | " .....               |
| Assistant General Passenger Agent ..... | S. D. McLeich .....  | " .....               |
| Superintendent .....                    | R. B. Starbuck ..... | Mattcon, Ill. ....    |
| Superintendent of Telegraph .....       | R. B. Starbuck ..... | " .....               |
| General Baggage Agent .....             | F. R. Wheeler .....  | Evansville, Ind. .... |

## QUINCY, OMAHA &amp; KANSAS CITY RAILWAY COMPANY.

## OFFICERS.

| Title.                                       | Name.                   | Location of Office. |
|--|-------------------------|---------------------|
| Chairman of the Board.....                   | Chas. H. Bull.....      | Quincy, Ill.....    |
| President.....                               | Chas. H. Bull.....      | " .....             |
| Vice-President and General Manager....       | Amos Green .....        | " .....             |
| Secretary .....                              | C. H. Spencer .....     | " .....             |
| Treasurer .....                              | E. J. Parker .....      | " .....             |
| General Solicitor.....                       | William McFadon. ....   | " .....             |
| Auditor .....                                | John M. Savin .....     | " .....             |
| Traffic Manager.....                         | J. H. Best .....        | " .....             |
| Superintendent of Transportation. ....       | C. E. Soule .....       | " .....             |
| Superintendent of Telegraph.....             | A. B. Cowan.....        | " .....             |
| Agents in Illinois, for transfer of stock... | L. and C. H. Bull. .... | " .....             |

## ROCK ISLAND &amp; PEORIA RAILWAY COMPANY.

## OFFICERS.

| Title.  | Name.                | Location of Office.    |
|---|----------------------|------------------------|
| President.....                                    | R. R. Cable .....    | Rock Island, Ill. .... |
| Vice-President.....                               | A. Kimball .....     | Davenport, Iowa....    |
| Secretary and Treasurer .....                     | H. B. Sudlow.....    | Rock Island, Ill....   |
| Cashier .....                                     | R. Slaymaker .....   | " .....                |
| Chief Engineer.....                               | J. Elder .....       | Peoria, Ill .....      |
| Auditor .....                                     | R. H. Hudson.....    | Rock Island, Ill....   |
| General Freight, Passenger and Ticket Agent ..... | R. Stockhouse .....  | " .....                |
| General Superintendent .....                      | H. B. Sudlow .....   | " .....                |
| Superintendent of Telegraph.....                  | H. P. Greenough..... | " .....                |
| Agent in Illinois, for transfer of stock...       | H. B. Sudlow.....    | " .....                |

## ST. LOUIS, ALTON &amp; SPRINGFIELD RAILROAD COMPANY.

## OFFICERS.

| Title.                                 | Name.                 | Location of Office.  |
|--|-----------------------|----------------------|
| Vice-President.....                    | Chas. E. Kimball..... | New York, N. Y. .... |
| Secretary .....                        | Joseph Dickson .....  | Springfield, Ill.... |
| Treasurer.....                         | Chas. E. Kimball..... | " .....              |
| Cashier .....                          | D. S. Mitchell .....  | " .....              |
| Chief Engineer.....                    | H. C. Swift .....     | " .....              |
| Attorney or General Counsel .....      | Joseph Dickson .....  | " .....              |
| Auditor .....                          | D. S. Mitchell.....   | " .....              |
| General Manager .....                  | H. A. Fisher.....     | " .....              |
| General Freight and Passenger Agent... | F. E. Fisher .....    | " .....              |
| Superintendent of Telegraph.....       | H. A. Fisher.....     | " .....              |

## ST. LOUIS, ALTON &amp; TERRE HAUTE RAILROAD COMPANY.

## OFFICERS.

| Title.  | Name.                     | Location of Office.    |
|---|---------------------------|------------------------|
| Chairman of the Board .....                                   | Geo. Foster Peabody ..... | New York, N. Y. ....   |
| President .....   | Geo. W. Parker .....      | St. Louis, Mo. ....    |
| Secretary .....   | E. F. Leonard .....       | Springfield, Ill. .... |
| Treasurer .....   | Geo. W. Parker .....      | St. Louis, Mo. ....    |
| Cashier .....   | Henry T. Nash .....       | " .....                |
| Auditor .....   | Henry T. Nash .....       | " .....                |
| General Manager .....   | Geo. W. Parker .....      | " .....                |
| General Freight, Passenger, Ticket and<br>Baggage Agent ..... | Geo. E. Lacy .....        | " .....                |
| Superintendent .....  | W. S. Wilson .....        | Pinckneyville, Ill. .. |
| Superintendent of Telegraph .....                             | W. S. Wilson .....        | " .....                |
| Agent in Illinois, for transfer of stock ....                 | E. F. Leonard .....       | Springfield, Ill. .... |

## BELLEVILLE &amp; CARONDELET RAILROAD COMPANY.

## OFFICERS.

| Title.  | Name.                | Location of Office.    |
|---|----------------------|------------------------|
| President .....                               | M. T. Stookey .....  | Belleville, Ill. ....  |
| Secretary .....                               | Henry T. Nash .....  | St. Louis, Mo. ....    |
| Treasurer .....                               | Geo. W. Parker ..... | " .....                |
| Agent in Illinois, for transfer of stock .... | E. F. Leonard .....  | Springfield, Ill. .... |

## BELLEVILLE &amp; ELDORADO RAILROAD COMPANY.

## OFFICERS.

| Title.  | Name.                   | Location of Office.    |
|---|-------------------------|------------------------|
| President .....                               | E. F. Leonard .....     | Springfield, Ill. .... |
| Secretary .....                               | Henry T. Nash .....     | St. Louis, Mo. ....    |
| Treasurer .....                               | R. Fulton Cutting ..... | New York, N. Y. ....   |
| Agent in Illinois, for transfer of stock .... | E. F. Leonard .....     | Springfield, Ill. .... |

## BELLEVILLE &amp; SOUTHERN ILLINOIS RAILROAD COMPANY.

## OFFICERS.

| Title.  | Name.               | Location of Office.    |
|---|---------------------|------------------------|
| President .....                               | Thos. Denny .....   | New York, N. Y. ....   |
| Secretary .....                               | E. F. Leonard ..... | Springfield, Ill. .... |
| Assistant Secretary .....                     | H. A. Crosby .....  | New York, N. Y. ....   |
| Treasurer .....                               | J. K. Gape .....    | " .....                |
| Agent in Illinois, for transfer of stock .... | E. F. Leonard ..... | Springfield, Ill. .... |

## CHICAGO, ST. LOUIS &amp; PADUCAH RAILWAY COMPANY.

## OFFICERS.

| Title.                                      | Name.                 | Location of Office.    |
|---|-----------------------|------------------------|
| President .....                             | W. K. Murphy .....    | Pineknayville, Ill..   |
| Secretary and Treasurer .....               | Henry T. Nash .....   | S. Louis, Mo. ....     |
| Assistant Secretary .....                   | Henry A. Crosby ..... | New York, N. Y....     |
| Agent in Illinois, for transfer of stock... | E. F. Leonard .....   | Springfield, Ill. .... |

## ST. LOUIS SOUTHERN RAILROAD COMPANY.

## OFFICERS.

| Title.               | Name.                    | Location of Office.    |
|----------------------|--------------------------|------------------------|
| President .....      | Ephraim C. Davies .....  | Cincinnati, O. ....    |
| Vice-President ..... | C. W. Fairbanks .....    | Indianapolis, Ind..    |
| Secretary .....      | C. H. Bosworth .....     | Springfield, Ill. .... |
| Treasurer .....      | John E. McGettigan ..... | Indianapolis, Ind..    |

## CARBONDALE &amp; SHAWNEETOWN RAILROAD COMPANY.

## OFFICERS.

| Title.                        | Name.                    | Location of Office.    |
|-------------------------------|--------------------------|------------------------|
| Chairman of the Board .....   | John E. McGettigan ..... | Indianapolis, Ind..    |
| President .....               | John E. McGettigan ..... | Indianapolis, Ind..    |
| Secretary and Treasurer ..... | C. H. Bosworth .....     | Springfield, Ill. .... |

## ST. LOUIS &amp; CHICAGO RAILWAY COMPANY.

## OFFICERS.

| Title.                            | Name.                | Location of Office.    |
|-----------------------------------|----------------------|------------------------|
| Receiver .....                    | R. J. Cavett .....   | Springfield, Ill. .... |
| Attorney or General Counsel ..... | Frank H. Jones ..... | " .....                |
| Auditor .....                     | C. H. Bosworth ..... | " .....                |
| General Manager .....             | C. H. Bosworth ..... | " .....                |
| General Freight Agent .....       | C. H. Bosworth ..... | " .....                |
| General Passenger Agent .....     | C. H. Bosworth ..... | " .....                |

## ST. LOUIS &amp; PEORIA RAILROAD COMPANY.

## OFFICERS.

| Title.                | Name.                  | Location of Office.    |
|-----------------------|------------------------|------------------------|
| President .....       | Giles E. Taintor ..... | New York, N. Y....     |
| Secretary .....       | A. J. Moorshead .....  | Springfield, Ill. .... |
| General Manager ..... | A. J. Moorshead .....  | " .....                |

## TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS.

## OFFICERS.

| Title.                           | Name.                   | Location of Office. |
|----------------------------------|-------------------------|---------------------|
| President.....                   | Wm. Taussig.....        | St. Louis, Mo.....  |
| Vice-President.....              | John F. Barnard.....    | ".....              |
| Secretary.....                   | James Hanna.....        | ".....              |
| Treasurer.....                   | A. H. Cal-p.....        | New York, N. Y....  |
| Assi-tant Treasurer.....         | James Hanna.....        | St. Louis, Mo.....  |
| Cashier.....                     | Fred. C. Daal.....      | ".....              |
| Chief Engineer.....              | Wm. Taussig.....        | ".....              |
| Attorney or General Counsel..... | S. M. Brockinridge..... | ".....              |
| Auditor.....                     | James Hanna.....        | ".....              |
| Assistant Auditor.....           | Emil Ulric.....         | ".....              |
| General Manager.....             | Wm. Taussig.....        | ".....              |
| General Passenger Agent.....     | V. W. Fisher.....       | ".....              |
| General Freight Agent.....       | Wm. G. Broughton.....   | ".....              |
| General Superintendent.....      | Frank Stillwell.....    | ".....              |
| Superintendent of Telegraph..... | E. A. Chenery.....      | ".....              |
| General Baggage Agent.....       | W. M. Steele.....       | ".....              |

## TERRE HAUTE &amp; INDIANAPOLIS RAILROAD COMPANY.

## OFFICERS.

| Title.                                | Name.                   | Location of Office. |
|---------------------------------------|-------------------------|---------------------|
| President and General Manager.....    | William R. McKeen.....  | Terre Haute, Ind..  |
| Vice-President.....                   | John G. Williams.....   | ".....              |
| Secretary.....                        | Geo. E. Farrington..... | ".....              |
| Treasurer.....                        | J. W. Cruft.....        | ".....              |
| Chief Engineer.....                   | A. J. Gibbons.....      | ".....              |
| General Counsel.....                  | John G. Williams.....   | ".....              |
| Auditor.....                          | W. S. Roney.....        | ".....              |
| Assistant General Manager.....        | Jos. Hill.....          | St. Louis, Mo.....  |
| General Freight Agent.....            | H. W. Hibbard.....      | ".....              |
| General Passenger Agent.....          | E. A. Ford.....         | Pittsburgh, Pa..... |
| Ass't General Passenger Agents.....   | J. M. Chesbrough.....   | St. Louis, Mo.....  |
|                                       | H. R. Dering.....       | Indianapolis, Ind.. |
| Superintendent of Transportation..... | N. K. Elliott.....      | Terre Haute, Ind..  |
| Assistant Superintendent.....         | E. R. Darlon.....       | St. Louis, Mo.....  |
| Superintendent of Telegraph.....      | R. B. Woolsey.....      | Terre Haute, Ind..  |
| General Baggage Agent.....            | R. R. Bentley.....      | Pittsburgh, Pa..... |

## ST. LOUIS, VANDALIA &amp; TERRE HAUTE RAILROAD COMPANY.

## OFFICERS.

| Title.                   | Name.                 | Location of Office.  |
|--------------------------|-----------------------|----------------------|
| President.....           | Thos. D. Messler..... | Pittsburgh, Pa.....  |
| Secretary.....           | S. B. Liggett.....    | ".....               |
| Treasurer.....           | John E. Davidson..... | ".....               |
| Assistant Secretary..... | C. D. Hoiles.....     | Greenville, Ill..... |



## TERRE HAUTE &amp; PEORIA RAILROAD COMPANY.

## OFFICERS.

| Title.  | Name.                 | Location of Office. |
|---|-----------------------|---------------------|
| Chairman of the Board .....                       | C. W. Fairbanks ..... | Indianapolis, Ind.. |
| President .....                                   | C. W. Fairbanks ..... | " "                 |
| Secretary .....                                   | F. J. Richman .....   | " "                 |
| Treasurer .....                                   | I. H. Burgoon .....   | Decatur, Ill. ....  |
| Cashier .....                                     | F. M. Hobart .....    | " "                 |
| General Solicitor .....                           | E. Jacoby .....       | Indianapolis, Ind.. |
| Auditor .....                                     | W. M. Strange .....   | Decatur, Ill. ....  |
| General Manager .....                             | I. H. Burgoon .....   | " "                 |
| General Freight, Passenger and Ticket Agent ..... | A. Stevens .....      | " "                 |
| Superintendent of Telegraph .....                 | I. H. Burgoon .....   | " "                 |

## TOLEDO, PEORIA &amp; WESTERN RAILWAY COMPANY.

## OFFICERS.

| Title.  | Name.                  | Location of Office. |
|---|------------------------|---------------------|
| Chairman of the Executive Committee...            | Charles Moran .....    | New York, N. Y....  |
| President .....                                   | E. F. Leonard .....    | Peoria, Ill. ....   |
| Vice-President .....                              | E. N. Armstrong .....  | " "                 |
| Secretary .....                                   | E. D. Usner .....      | " "                 |
| Treasurer .....                                   | E. F. Leonard .....    | " "                 |
| General Solicitor .....                           | Walter S. Horton ..... | " "                 |
| Auditor .....                                     | E. D. Usner .....      | " "                 |
| General Manager .....                             | E. F. Leonard .....    | " "                 |
| General Freight Agent .....                       | H. D. Gould .....      | " "                 |
| Assistant General Freight Agent .....             | Daniel Mowat .....     | " "                 |
| General Passenger, Ticket and Baggage Agent ..... | H. D. Gould .....      | " "                 |
| General Superintendent .....                      | E. N. Armstrong .....  | " "                 |
| Superintendent of Telegraph .....                 | C. B. Plantz .....     | " "                 |
| Agent in Illinois, for transfer of stock .....    | E. D. Usner .....      | " "                 |

## TOLEDO, ST. LOUIS &amp; KANSAS CITY RAILROAD COMPANY.

## OFFICERS.

| Title.                                | Name.                | Location of Office. |
|---------------------------------------|----------------------|---------------------|
| President .....                       | S. R. Callaway ..... | New York, N. Y....  |
| Secretary and Treasurer .....         | Isaac W. White ..... | " "                 |
| Chief Engineer .....                  | A. L. Mills .....    | Toledo, Ohio .....  |
| General Solicitor .....               | Clarence Brown ..... | " "                 |
| Auditor .....                         | D. D. Davis .....    | " "                 |
| General Manager .....                 | S. R. Callaway ..... | " "                 |
| General Freight Agent .....           | W. S. Weed .....     | " "                 |
| Assistant General Freight Agent ..... | D. F. Jennings ..... | St. Louis, Mo. .... |
| General Passenger Agent .....         | C. C. Jennings ..... | Toledo, Ohio .....  |
| Superintendent .....                  | C. N. Pratt .....    | Frankfort, Ind....  |
| Superintendent of Telegraph .....     | N. McKinnon .....    | Toledo, Ohio .....  |

## WABASH RAILROAD COMPANY.

## OFFICERS.

| Title.   | Name.                | Location of Office.   |
|--|----------------------|-----------------------|
| Chairman of the Board .....                        | O. D. Ashley .....   | New York, N. Y....    |
| President .....                                    | O. D. Ashley .....   | " .....               |
| Vice-President .....                               | Edgar T. Wells ..... | " .....               |
| Vice-President .....                               | James F. How .....   | St. Louis, Mo .....   |
| Secretary .....                                    | J. C. Otteson .....  | New York, N. Y....    |
| Treasurer .....                                    | F. L. O'Leary .....  | St. Louis, Mo .....   |
| Chief Engineer .....                               | W. S. Lincoln .....  | " .....               |
| General Solicitor .....                            | W. H. Blodgett ..... | " .....               |
| Auditor .....                                      | D. B. Howard .....   | " .....               |
| Assistant Auditor .....                            | E. B. Pryor .....    | " .....               |
| General Manager .....                              | C. M. Hays .....     | " .....               |
| Traffic Manager .....                              | Wm. Knight .....     | " .....               |
| General Freight Agent .....                        | S. B. Knight .....   | " .....               |
| Assistant General Freight Agent .....              | J. D. Lund .....     | " .....               |
| General Passenger Agent .....                      | F. Chandler .....    | " .....               |
| General Ticket Agent .....                         | F. Chandler .....    | " .....               |
| Assistant General Ticket and Passenger Agent ..... | C. S. Crane .....    | " .....               |
| General Superintendent .....                       | H. L. Magee .....    | " .....               |
| Division Superintendent .....                      | E. A. Gould .....    | Peru, Ind. ....       |
| Division Superintendent .....                      | J. S. Goodrich ..... | Chicago, Ill. ....    |
| Division Superintendent .....                      | F. H. McGuigan ..... | Kansas City, Mo... .. |
| Superintendent of Telegraph .....                  | G. C. Kinsman .....  | Decatur, Ill. ....    |
| General Baggage Agent .....                        | S. H. Overholt ..... | St. Louis, Mo .....   |

## WABASH, CHESTER &amp; WESTERN RAILROAD COMPANY.

## OFFICERS.

| Title.   | Name.                   | Location of Office. |
|--|-------------------------|---------------------|
| President .....                                | Nathan Cole .....       | St. Louis, Mo ..... |
| Vice-President .....                           | C. B. Cole .....        | Chester, Ill. ....  |
| Secretary .....                                | H. C. Cole .....        | " .....             |
| Treasurer .....                                | C. B. Cole .....        | " .....             |
| Auditor .....                                  | C. E. Kingsbury .....   | " .....             |
| General Manager .....                          | C. B. Cole .....        | " .....             |
| General Fr't, Passenger and Ticket Ag't .....  | C. E. Kingsbury .....   | " .....             |
| General Superintendent .....                   | J. R. Hawkins .....     | " .....             |
| Agent in Illinois, for transfer of stock ..... | H. C. Cole, Sec'y ..... | " .....             |

## WISCONSIN CENTRAL LINES.

## OFFICERS.

| Title.                            | Name.                 | Location of Office.  |
|-----------------------------------|-----------------------|----------------------|
| Local Treasurer .....             | R. W. Maguire .....   | Milwaukee, Wis....   |
| Chief Engineer .....              | F. W. Fratt .....     | " .....              |
| General Solicitor .....           | D. S. Wegg .....      | " .....              |
| Assistant Attorney .....          | Howard Morris .....   | " .....              |
| Auditor .....                     | T. J. Hyman .....     | " .....              |
| General Manager .....             | R. S. Ainslie .....   | " .....              |
| Traffic Manager .....             | H. C. Barlow .....    | Chicago, Ill. ....   |
| General Freight Agent .....       | J. B. Cavanaugh ..... | " .....              |
| General Passenger Agent .....     | Louis Eekstien .....  | " .....              |
| Division Superintendent .....     | A. R. Horn .....      | St. Paul, Minn ..... |
| Division Superintendent .....     | M. B. Cutler .....    | Stevens Point, Wis.. |
| Division Superintendent .....     | E. R. Knowlton .....  | Waukesha, Wis....    |
| Superintendent of Telegraph ..... | O. C. Green .....     | St. Paul, Minn....   |

## CHICAGO &amp; WISCONSIN RAILROAD COMPANY.

## OFFICERS.

| Title.                            | Name.                | Location of Office. |
|-----------------------------------|----------------------|---------------------|
| President and Treasurer.....      | Chas. L. Colby.....  | Milwaukee, Wis....  |
| Vice-President and Secretary..... | Edwin H. Abbott..... | .....               |

## LIST OF RAILROADS INCORPORATED FOR YEAR END- ING JUNE 30, 1890.

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The Chicago and Blue Island Railroad Co. From the village of Blue Island, in Cook county, Ill., to the city of Chicago, in Cook county, Ill. Office, Chicago, Ill. Capital stock, \$50,000. Directors, Charles S. Harmon, Frank O. Young, William Hansbrough, Blue Island, Ill.; Charles C. Collins, Chicago, Ill., and Austin Wissall, Morgan Park, Ill. Filed, July 9, 1889.

East St. Louis and St. Louis Electric Railway Co. From a point in the Illinois and St. Louis Bridge, where the same is intersected by the boundary line between the states of Illinois and Missouri, thence eastwardly to and through the city of East St. Louis, Ill., thence to the National Stock Yards, in the county of St. Clair, Ill., and thence to some eligible and convenient point in St. Clair county. Office, East St. Louis, Ill. Capital stock, \$100,000. Directors, Charles C. Carroll and Henry C. Latham, Springfield, Ill.; S. A. Barton, Chicago, Ill., and D. R. Powell and E. C. Lackland, St. Louis, Mo. Filed, July 30, 1889.

Streator and Seneca Railroad Co. From Streator, LaSalle county, Ill., to Seneca, LaSalle county, Ill. Office, Chicago, Ill. Capital stock, \$600,000. Directors, George H. Harlow, John J. Allen, Charles C. Whitacre, Russell H. Stevens and Lawson A. Gilbert, all of Chicago, Ill. Filed August 10, 1889.

Fort Wayne, Wilmington and Western Railway Co. From a point in Will county, Ill., thence westerly through Washington, Peotone and Wilmington in said county to Blodgett Station in said county, on the Atchison, Topeka and Santa Fe Railroad. Office, Wilmington, Ill. Capital stock, \$2,000,000. Directors, Edmund Allen and M. N. M. Stuart, of Wilmington, Ill.; Charles Smith, Channahon, Ill.; Michael Collins, Peotone, Ill., and David Willard, Wesley, Ill. Filed, August 22, 1889.

The Perry, Pittsfield and Southern Railroad Co. From Perry, Pike county, Ill., to Pittsfield in said county, with branches from Pittsfield to Nebo, in said county, and from Pittsfield to a point in said county on the Mississippi river, opposite Louisiana, Mo. Office, Pittsfield, Ill. Capital stock, \$500,000. Directors, Clark P. Chapman, Pittsfield, Ill.; Asabel Hinman, Perry, Ill.; Eden M. Seeley, Pittsfield, Ill.; George W. Witham, Perry, Ill., and Edward F. Binns and George Barber, Pittsfield, Ill. Filed, August 26, 1889.

The Illinois Elevated Railway Co. From a point within the corporate limits of the city of Chicago, Cook county, Ill., in a northerly direction to the line of said county, and again from a point within the corporate limits of Chicago, Ill., in a westerly direction to the line of said county, and again from a point within the corporate limits of Chicago, Ill., in a southerly direction to the line of said county, and again from a point within the corporate limits of Chicago, Ill., in a southwesterly direction to the line of said county, together with necessary branches or loop lines. Office, Chicago, Ill. Capital stock, \$10,000,000. Directors, Michael W. Ryan, John Tyler, Edward C. Donnellan, William W. Bell and Paul Brown, all of Chicago, Ill. Filed, August 28, 1889.

The Perry, Pittsfield and Southern Railroad Co. From Perry, Pike county, Ill., to Pittsfield in said county, with branch from Pittsfield to Nebo in said county, and from Pittsfield to a point in said county on the Mississippi river opposite Louisiana, Mo. Office, Pittsfield, Ill. Capital stock, \$100,000. Directors, Clark P. Chapman, Pittsfield, Ill.; Asabel Hinman, Perry, Ill.; Eden M. Seeley, Pittsfield, Ill.; George W. Witham, Perry, Ill., and Edward F. Binns and George Barber, Pittsfield, Ill. Filed, August 31, 1889.

Chicago and Kenosha Railway Co. From such terminus within the city of Chicago, Ill., as may be selected by said corporation to a point on the Illinois State line in Lake county. Office, Chicago, Ill. Capital stock, \$100,000. Directors, Adams A. Goodrich, Jerseyville, Ill., and Frank H. McCulloch, Frank H. Bowen, Harry P. Young and James C. Hutchins, Chicago, Ill. Filed, Sept. 20, 1889.

Joliet and Blue Island Railway Co. From a point at or near Joliet, Will county, Ill., to a point at or near the village of Blue Island, Cook county, Ill. Office, Chicago, Ill. Capital stock, \$100,000. Directors, Adams A. Goodrich, Jerseyville, Ill., and Frank H. McCulloch, Frank H. Bowen, Harry P. Young and James C. Hutchins, Chicago, Ill. Filed, Sept. 20, 1889.

Calumet and Blue Island Railway Co. From such terminus within the City of Chicago, Ill., as may be selected by said corporation, to a point at or near the village of Blue Island, Cook county, Ill. Office, Chicago, Ill. Capital stock, \$200,000. Directors, Adams A. Goodrich, Jerseyville, Ill., and Frank H. McCulloch, Frank H. Bowen, Harry P. Young and James C. Hutchins, Chicago, Ill. Filed, Sept. 20, 1889.

Ava, Grand Tower and Cairo Railroad Co. From the village of Ava, Jackson county, Ill., to the city of Cairo, Alexander county, Ill., and passing through the town of Grand Tower, in Jackson county, and passing through the town of Thebes in Alexander county, and passing through the county of Union. Office, Ava, Ill. Capital stock, \$1,000,000. Directors, Johnston Husband, Wm. E. Talbott, Murry Dean, Whitney Gilbreath, Don E. Detrich, John Conner and Samuel H. Douglas, all of Ava, Ill. Filed, Oct. 16, 1889.

Chicago Central Railway Co. From the city of Chicago, Cook county, Ill., to a point on the west boundary line of the State of Illinois at or near the south boundary line of Adams county, and also from the city of Chicago to a point on the south boundary line of Iroquois county. Office, Chicago, Ill. Capital stock, \$1,000,000. Directors, Milton R. Wood, Charles W. Needham, Erwin E. Wood, William L. Moss and Edwin L. Waugh, all of Chicago, Ill. Filed, Oct. 18, 1889.

Chicago and Central Southern Railroad Co. From a point to be hereafter selected on the State line between the states of Indiana and Illinois, in Edgar county, Ill., through the counties of Edgar, Vermilion, Iroquois, Kankakee, Will and Cook, to such terminus in the city of Chicago as may be selected. Office, Chicago, Ill. Capital stock, \$4,000,000. Directors, Benjamin T. Lewis, LaGrange, Ill.; B. D. Harris, Frederick S. Winston and James F. Meagher, Chicago, Ill., and Frank P. Crandon, Evanston, Ill. Filed, Oct. 26, 1889.

The St. Louis, Indianapolis and Eastern Railroad Company of Illinois. From East St. Louis, St. Clair county, Ill., in an easterly direction through the counties of St. Clair, Madison, Clinton, Bond, Fayette, Marion, Clay, Effingham, Jasper and Crawford, to the center of the Wabash river, at a point near the village of Palestine, Ill., a distance of about 148 miles; also to purchase, own, operate and maintain as a part of said main line of railroad a railroad commencing at the city of Effingham, Effingham county, Ill., and running southeasterly to a connection with said main line near the city of Newton, Jasper county, Ill., being a distance of about 22 miles. Office, Chicago, Ill. Capital stock, \$6,800,000. Directors, Horatio H. Gardner, Thomas B. Rice, John Prindiville, John L. Stockton and Ira C. Wood, all of Chicago, Ill. Filed, Oct. 30, 1889.



Chicago and State Line Terminal Railway Co. From the Indiana State line between the south line of the town of Thornton, Cook county, Ill., and Lake Michigan, northwesterly to and through the city of Chicago, Cook county, Ill. Office, Chicago, Ill. Capital stock, \$3,000,000. Directors, Charles E. Rand, Theo. Emery, John Emmet Phillips, Joseph McH. Holmes and Charles H. Pringle, all of Chicago, Ill. Filed, Nov. 2, 1889.

Chicago and Northern Pacific Railroad Co.—

1st. From the southwest corner of Harrison street and Fifth avenue in the city of Chicago, Cook county, Ill., westerly and southwesterly through the city of LaSalle to the Mississippi river.

2d. From a point in the vicinity of the intersection of Crawford avenue and West Randolph street in the city of Chicago, westerly to the Mississippi river.

3d. From some convenient point on route number two in the town of Proviso, southerly and southwesterly to the city of East St. Louis.

4th. From a point in the vicinity of the intersection of Crawford avenue and West Randolph street in the city of Chicago, southerly to the southern limits of Cook county, with a branch easterly to Lake Michigan and a branch westerly to the west limits of Cook county.

5th. From some convenient point on route number one in the west division of the city of Chicago, southerly to the Ohio river, with branches from three convenient points in Cook county easterly to the eastern boundary of the State of Illinois.

6th. From some convenient point in Macon county on route number three southerly to the Ohio river.

7th. From some convenient point on route number one in the town of Cicero, southerly to the southern limits of Cook county.

8th. From some convenient point on route number one between Crawford avenue in the city of Chicago and the west limits of the town of Cicero, southwesterly to the western limits of Cook county. Office, Chicago, Ill. Capital stock, \$30,000,000. Directors, James L. High, Alfred D. Eddy, Chauncey W. Martyn, James E. Rogers and David Eichberg, all of Chicago, Ill. Filed, Nov. 23, 1889.

Belleville and East St. Louis Railway Co. From Belleville, Ill., to East St. Louis, Ill. Office, Belleville, Ill. Capital stock, \$500,000. Directors, Julius Kohl, Belleville, Ill.; Henry Seiter and James D. Baker, Lebanon, Ill.; Herman G. Weber, Belleville, Ill.; J. L. Wiggins, East St. Louis, Ill.; Joseph Fuess, Belleville, Ill.; Henry D. Sexton, East St. Louis, Ill., and Charles P. Knispel, Belleville, Ill. Filed, Nov. 27, 1889.

Belleville Terminal Railway Co. From a point within or adjoining the city of Belleville, Ill., around said city of Belleville so as to connect all the railways within said city with one another. Office, Belleville, Ill. Capital stock, \$100,000. Directors, Julius Kohl, Belleville, Ill.; Henry Seiter and James D. Baker, Lebanon, Ill.; Herman G. Weber, Belleville, Ill.; J. L. Wiggins, East St. Louis, Ill.; Joseph Fuess, Belleville, Ill.; Henry D. Sexton, East St. Louis, Ill., and Charles P. Knispel, Belleville, Ill. Filed, Nov. 27, 1889.

St. Louis and Illinois Central Railway Co. From Eureka, Woodford county, Ill., southerly through the counties of Woodford, McLean, Tazewell, Logan, Sangamon, Montgomery, Macoupin and Madison to Alhambra, Madison county, Ill., with necessary side tracks. Office, Springfield, Ill. Capital stock, \$2,800,000. Directors, Robert McWilliams, Litchfield, Ill.; J. M. Stark, Pawnee, Ill.; H. R. Phinney, Alton, Ill.; H. W. Dana, Lincoln, Ill.; John E. Risley, New York, N. Y.; Tracey E. Roberts, Brooklyn, N. Y., and Frank C. Hollins, New York, N. Y. Filed, Nov. 27, 1889.

Chicago and Southeastern Railroad Company. From Chicago, Ill., to a point on the Indiana State line in the township of Thornton, Cook county, Ill. Office, Chicago, Ill. Capital stock, \$100,000. Directors, Adams A.

Goodrich, Jerseyville, Ill.: Eugene E. Prussing, Highland Park, Ill., and James C. Hutchins, Frank H. McCulloch and Frank H. Bowen, Chicago, Ill. Filed, Dec. 5, 1889.

St. Louis and Eastern Railway Co. From a point on the Mississippi river opposite St. Louis, Mo., in Madison county, Ill., to a point on the Illinois State line in Crawford county, Ill., with such lateral branches and spurs as may be necessary. Office, East St. Louis, Ill. Capital stock, \$200,000. Directors, H. R. Durkee and J. S. Brewer, Chicago, Ill.: E. C. Springer, Edwardsville, Ill.: William F. Nedringhaus, George O. Carpenter, Jr., and William E. Guy, St. Louis, Mo., and C. E. Bradish, Alton, Ill. Filed, Dec. 16, 1889.

St. Louis and Belleville Railway Co. From the city of Belleville, St. Clair county, Ill., to the city of St. Louis, Mo. Office, Belleville, Ill. Capital stock, \$300,000. Directors, D. P. Alexander, Wichita, Kansas; George Knobeloch, Carrie T. Alexander and Fred. Holdner, Belleville, Ill., and John D. Alexander, Wichita, Kansas. Filed, Dec. 18, 1889.

Alton, Venice and East St. Louis Railroad Co. From the city of Alton, Madison county, Ill., by Venice, to the city of East St. Louis, St. Clair county, Ill. Office, Alton, Ill. Capital stock, \$300,000. Directors, Henry D. Sexton, East St. Louis, Ill.: William E. Smith, Z. B. Job, H. J. Bowman, John N. Drummond and A. E. Mills, Alton, Ill.: T. J. Irish, Nameoki, Ill.: Frank McCambridge, Venice, Ill., and John Weding, Nameoki, Ill. Filed, Jan. 9, 1890.

The Jacksonville, Louisville and St. Louis Railway Co. From the city of Jacksonville, Morgan county, Ill., through the counties of Morgan, Sangamon, Macoupin, Montgomery, Bond, Clinton and Marion to the city of Centralia, Marion county, Ill. Office, Jacksonville, Ill. Capital stock, \$1,500,000. Directors, J. Henry Dunn, Germantown, Pa.; William Elliott, Chestnut Hill, Pa., and Isaac L. Morrison, William S. Hook and Marcus Hook, Jacksonville, Ill. Filed, Jan. 18, 1890.

The St. Louis, Chester and Grand Tower Railroad Co. From East St. Louis, St. Clair county, Ill., in a southeasterly direction through the counties of St. Clair, Monroe, Randolph and Jackson and the town of Chester to the town of Grand Tower. Office, East St. Louis, Ill. Capital stock, \$1,500,000. Directors, William Carson, Jr., S. Dwight Eaton, William D. Eaton and Walter B. Eaton, Burlington, Ia.; Thomas N. Chase, East St. Louis, Ill.; H. M. Pollard, St. Louis, Mo., and E. Reynolds. Filed, Jan. 23, 1890.

The North and South Railroad Company of Illinois. From Eureka, Woodford county, Ill., southerly through the counties of Woodford, McLean, Tazewell, Logan, Sangamon, Montgomery, Macoupin and Madison to Alhambra, Madison county, Ill. Office, Springfield, Ill. Capital stock, \$2,800,000. Directors, C. H. Bosworth, Springfield, Ill.: J. M. Stark, Pawnee, Ill.; John W. Bunn, Springfield, Ill.: David D. Withers, New York, N. Y., and Gerald L. Hoyt, New York, N. Y. Filed, Jan. 23, 1890.

St. Louis, Venice and Alton Railroad Co. From the city of Alton, Madison county, Ill., to a point in the city of East St. Louis, Ill., opposite St. Louis, Mo. Office, East St. Louis, Ill. Capital stock, \$500,000. Directors, John H. Overall and Alfred Carr, St. Louis, Mo.; Jerome Winstanley, Geo. W. Locke and Jas. K. Ewing, East St. Louis, Ill.; E. E. Rutledge, Alton, Ill., and H. M. Needles, Belleville, Ill. Filed, January 31, 1890.

The Peoria and Eastern Railway Co. From Pekin, Ill., through the counties of Tazewell, McLean, DeWitt, Piatt, Champaign and Vermilion to the boundary line between the States of Illinois and Indiana, with an extension through the counties of Vermilion, Warren, Fountain, Montgomery, Boone, Hendricks and Marion, to Indianapolis, Ind. Office, Danville, Ill. Capital stock, \$10,000,000. Directors, John Alfred Barnard, Indianapolis, Ind.; John A. Glover, Urbana, Ill., and Edmond L. Stewart, Danville, Ill. Filed, February 21, 1890.

Chicago, Blue Island and State Line Railway Co. From a point on the Illinois and Indiana State line in Cook county, Ill., northerly to and into

the city of Chicago, Ill. Office, Chicago, Ill. Capital stock, \$5,000,000. Directors, William Shingleton, William Black, Walter I. Pratt, Chas. H. Pringle and D. J. Evans, all of Chicago, Ill. Filed, February 27, 1890.

Chicago, Harvey and State Line Railway Co. From a point on the boundary line between the States of Illinois and Indiana, northerly to and into the city of Chicago, Ill. Office, Chicago, Ill. Capital stock, \$3,000,000. Directors, William Shingleton, William Black, Walter I. Pratt, Chas. H. Pringle and D. J. Evans, all of Chicago, Ill. Filed, February 27, 1890.

Chicago and Evanston Elevated Rapid Transit Co. From a convenient terminus at or near the point where North Clark street, in the city of Chicago, Ill. meets the Chicago river, thence in a northerly and north-westerly direction to a terminus at or near the place where Chicago avenue intersects Center street in the township of Evanston. Office, Chicago, Ill. Capital stock, \$12,000,000. Directors, John Cudahy, George F. Baldwin, Jacob A. Wolford, E. Partridge, Charles Dennehy, Thos. C. Dennehy, Fridolin Madlener and C. W. Partridge. Filed, March 8, 1890.

St. Louis, Chester and Grand Tower Railroad Co. From East St. Louis, Ill., through the counties of St. Clair, Monroe, Randolph and Jackson to Grand Tower, Ill. Office, East St. Louis, Ill. Capital stock, \$1,500,000. Directors, S. Dwight Eaton, Burlington, Ia.; H. M. Pollard, St. Louis, Mo.; Thos. M. Chase, East St. Louis, Ill.; William F. Barrett, Chicago, Ill. and M. C. Brown, East St. Louis, Ill. Filed, March 17, 1890.

St. Clair, Madison and St. Louis Belt Railroad Co. From a point in or near the city of Belleville, St. Clair county, Ill., to a point on the Mississippi river at or near the city of Alton, Madison county, Ill., and to a point on the boundary line between the States of Illinois and Missouri, and thence to St. Louis, Mo. Office, East St. Louis, Ill. Capital stock, \$300,000. Directors, H. M. Hill, East St. Louis, Ill., George S. Drake and Alvat Mansur, St. Louis, Mo., and F. M. Horner and John McIntyre, East St. Louis, Ill. Filed, March 28, 1890.

Cass Street, Lake View and Evanston Elevated Road Company. From within the city of Chicago, Cook county, Ill., to the village of Evanston in said county. Office, Chicago, Ill. Capital stock, \$6,000,000. Directors, L. R. Hall, Chicago, Ill., Samuel W. Jackson, Chicago, Ill., and Hervey, H. Anderson, Ravenswood, Ill. Filed, April 4, 1890.

Manufacturers Railroad Company. From the Indiana State line in the town of Thornton, Cook county, Ill., to Blue Island and Chicago in said county. Office, Chicago, Ill. Capital stock, \$150,000. Directors, Nathan G. Moore, Oak Park, Ill., and John P. Wilson, Houston C. Adcock, Alfred E. Spink and William B. McIlvaine, Chicago, Ill. Filed, April 10, 1890.

Springfield and Hillsboro Railroad Co. From Springfield through the counties of Sangamon, Christian and Montgomery to a point on the Toledo, St. Louis and Kansas City Railroad south of Hillsboro, Montgomery county, Ill. Office, Springfield, Ill. Capital stock, \$500,000. Directors, J. M. Stark, Pawnee, Ill.; J. R. Booth and C. W. Phillips, Springfield, Ill.; W. S. Weber, Zenobia, Ill., and Wm. H. Vigal, New City, Ill. Filed, April 12, 1890.

The Chicago and Eastern Railway Co. From the city of Chicago, Cook county, Ill., in an easterly direction through said county to a point on the State line between the States of Illinois and Indiana in said county, where the Indiana & Northern Railway shall intersect said State line. Office, Chicago, Ill. Capital stock, \$100,000. Directors, George G. Hadley, John E. Martin and George H. Ketcham, Toledo, O.; Thomas C. Louchs, Elgin, Ill., and Linnaeus E. Overman, Nelson C. Jennings and Christopher Whalen, Chicago, Ill. Filed, April 16, 1890.

Forsyth Elevated Railroad Co. From a point on the State line between the States of Illinois and Indiana in Cook county, Ill., northerly to, and into the city of Chicago, Ill. Office, Chicago, Ill. Capital stock, \$2,500,000. Directors, R. Clark Forsyth, Jacob Forsyth, John J. Forsyth, George W. F. Forsyth and Oliver O. Forsyth, all of Sheffield, Ind. Filed, April 24 1890.



The Chicago and Western Rapid Transit Railway Co. From and within the city of Chicago, Cook county, Ill., the main line to commence at some point east of Fifth avenue and between Madison and Harrison streets, and thence west to the present and future city limits: a branch to commence at the main line at a point between Canal and Carpenter streets and thence north to the present and future city limits; a branch to commence at main line between Ashland avenue and Wood street and thence north to a point 400 feet north or south of Milwaukee avenue: thence northwest to a point 400 feet north of North avenue: thence west to the present or future city limits. Office, Chicago, Ill. Capital stock, \$8,000,000. Directors, E. Louis Kuhns, Harry A. Ritter, Alexander F. Shuman, Percy L. Shuman and Joseph H. Defrees, all of Chicago, Ill. Filed, April 25, 1890.

Forsyth Elevated Railroad Co. From a point on the State line between the States of Illinois and Indiana in Cook county, Ill., northerly to, and into the city of Chicago, Ill. Office, Chicago, Ill. Capital stock, \$5,000,000. Directors, Jacob Forsyth, John J. Forsyth, George W. Forsyth and Oliver O. Forsyth, Sheffield, Ind., and Henry F. Moore, Chicago, Ill. Filed, April 26, 1890.

The Milwaukee Avenue Alley Railroad Co. From a point on the east line of Canal street, Chicago, Ill., between Madison and Fulton streets, thence northerly to a point between Fulton and Kinzie streets, thence northwesterly to Lawrence avenue in said city. Office, Chicago, Ill. Capital stock, \$5,000,000. Directors, August Meyer, John M. Krause, Edward Weissert, Andrew C. Lausten and Ferdinand Hanssen, all of Chicago, Ill. Filed, May 9, 1890.

New York, St. Louis and Kansas City Railway Co. From a connection with the New York, Wheeling, St. Louis and Chicago Railway Co. of Indiana at a point on the boundary between the States of Illinois and Indiana in Sullivan and Crawford counties, thence to East St. Louis, Ill. Office, East St. Louis, Ill. Capital stock, \$4,000,000. Directors, J. E. Williams, E. C. Rice and G. H. Ten Broek, St. Louis, Mo.; Alexander Flannigan and Benjamin H. Canby, East St. Louis Ill., and Thomas Cratty and Josiah Cratty, Chicago, Ill. Filed, May 15, 1890.

The Calumet Electric Street Railway Co. It is intended to construct and operate the said railway in, on, upon, over, along and across any and all of the streets and alleys within the present or future limits of the City of Chicago, Cook county, Ill., and to the boundary line between the States of Illinois and Indiana, and to such other place or places in Cook county as the said company may determine. Office, Chicago, Ill. Capital stock, \$50,000. Directors, Nathaniel K. Fairbank, Joel D. Harvey, William V. Jacobs, Otho S. Gaither and Samuel E. Gross, all of Chicago, Ill. Filed, May 16, 1890.

The Chicago Arcade Rapid Transit Railway Co. From and within the city of Chicago, Cook county, Ill., the main line to commence at some point east of Fifth avenue, between Madison and Harrison streets, thence west to the present and future city limits: a branch to commence at main line between Ashland avenue and Wood street and thence north to a point 400 feet north or south of Milwaukee avenue: thence northwest to a point 400 feet north of North avenue: thence west to the present and future city limits: a branch to commence at the first named branch at a point between Chicago avenue and Augusta street and extend west to present and future city limits, and such other branches as may be deemed necessary or proper by said company. Office, Chicago, Ill. Capital stock, \$8,000,000. Directors, E. Louis Kuhns, Harry A. Ritter, Alexander F. Shuman, Percy L. Shuman and Joseph H. Defrees, all of Chicago, Ill. Filed, May 21, 1890.

Quincy, Keokuk and Chicago Railroad Co. From Quincy, Adams county, Ill., to Niota, Hancock county, Ill. and to operate a road from Keokuk, Iowa, to Hamilton, Hancock county, Ill. Office, Quincy Ill. Capital stock, \$1,500,000. Directors, George W. Kretzinger, Charles Gibson and C.

R. Arnold, Chicago, Ill.: C. A. McLaughlin, Galesburg, Ill.: Samuel S. Gray, Hamilton, Ill.: William Hill and James F. Crawford, Warsaw, Ill.: James M. Bishop, Quincy, Ill., and A. C. Reed, Chicago, Ill. Filed, June 4, 1890.

Little Wabash Railway Co. From Effingham, Effingham county, Ill., to Carmi, White county, Ill. Office, Clay City, Ill. Capital stock, \$1,500,000. Directors, Edward Austin, Effingham, Ill.: Theron Gould, Georgetown, Ill. C. E. Hitts, Sailor Springs, Ill.: John B. Hutchens, Burnt Prairie, Ill.: J. I. McCauley and Israel Mills., Clay City, Ill.: Luther Yohe, Mt. Erie, Ill.: Nathaniel Holderly, Carmi, Ill., and James Price. Filed, June 30, 1890.

The Atlantic, Mexican and Pacific Railway Co. of Illinois. From a point on the Wabash river at or near Merom, Crawford county, Ill., westwardly through the counties of Crawford, Jasper, Effingham, Clay, Fayette, Marion, Bond, Clinton, Madison and St. Clair to or near East St. Louis, Ill.; also a line commencing at some point on the above line in Crawford county, thence southwestwardly through the counties of Crawford, Jasper, Richland, Clay, Wayne, Marion, Jefferson, Washington, Perry and Randolph to a point at or near Chester, Ill. Office, Robinson, Ill. Capital stock, \$5,600,000. Directors, A. Dale Owen, Philadelphia, Pa.: Henry Follett, London, England; Marchial Minkler, Detroit, Mich.; William H. McCourtie, Kalamazoo, Mich., and B. F. Bush, Grand Blanc, Mich. Filed, June 30, 1890.



## GRAIN INSPECTION DEPARTMENT.

## TWENTIETH ANNUAL REPORT.

*Showing the transactions of the Department from November 1,  
1889, to October 31, 1890.*

OFFICE OF CHIEF INSPECTOR OF GRAIN,  
CHICAGO, November 1, 1890.

*Hon. John R. Wheeler, Chairman Railroad and Warehouse Commission, Springfield, Illinois:*

DEAR SIR:—It gives me pleasure to announce, in submitting this, the twentieth annual report of this office for the consideration of your honorable board, that the year just closed has been the most prosperous one in the history of the department.

The record of 1880, which for ten years has stood out prominently upon the face of our reports, now falls into the second place.

In 1880, 270,524 cars and 1,622 canal boats brought to the city 138,896,368 bushels of grain. This number of cars has never until now been reached, although in 1888 and also in 1889 the number of bushels—owing to the increased size of the cars in use—was greater.

The record for the year just closed, however, shows receipts of 272,956 cars and 610 canal boats, containing 204,506,701 bushels of grain; being an increase of 2,432 cars and 65,610,333 bushels over 1880, and an increase over last year,—which was the largest ever before known in actual volume of grain—of 30,836,254 bushels.

## THE WORK OF THE DEPARTMENT.

The relations of the department to the trade and to the general public have been unusually satisfactory during the year.

The number of appeals from the decisions of the inspectors has fallen off about one-half, and there has been a noticeable absence of criticism and complaint.

These facts, as well as the many commendations which have come to me from country shippers, board of trade men and eastern buyers warrant me in the belief that the work of the inspectors on the tracks and in the elevators has been done with unusual care, fidelity and accuracy.

This is more noteworthy from the fact that in some respects the work has been attended with more difficulty and inconvenience to the men and with greater proportionate expense to the department than ever before.

The evident improvement in the work of the department is due in a great measure to the wisdom, vigilance and discretion of our supervising

inspectors whose constant attention to the work upon the tracks has resulted in a higher standard of efficiency and to a greater devotion of the men to the work in hand.

Their detection of any deviation from the established lines and their prompt correction of all errors have not only resulted in more exact justice to shippers, but have almost entirely done away with complaints of unevenness of grading.

The inculcation of a spirit of self-reliance in our inspectors and a stimulation of their professional pride by a judicious system of promotions and a rigid discipline in all matters involving neglect of duty or disobedience of orders have also tended largely to the improvement of the service.

Each man has been made to realize that his retention in his position or his promotion to a higher one depends entirely upon his own qualifications and his fidelity to duty, and not in any degree upon the personal or political influence he may be able to command.

The character of the service required of an inspector and the very delicate and responsible nature of his duties require that he should be absolutely free from apprehension as to the tenure of his office, and that he should, as far as possible, be divested of every interest or association that would divert his mind from the constant study and application necessary to substantial success in his profession.

#### DEPARTMENT EXPENSES.

That the necessity for larger expenses should keep pace with the increase of business during the past two years is but natural; and to the members of your honorable board who have been familiar with the necessities of the department as they arose, it will be a matter of congratulation that our expenses have been confined to so narrow a limit.

The letting of contracts for a year's supply of our printing, stationery, blank books and certificates to the lowest bidder has effected a saving of several hundred dollars in our annual expense, and has served to offset in some degree the expansion necessary to meet the demands of the trade.

A distinguishing feature of Chicago business methods is dispatch, and it is a matter of frequent remark that in no other grain market of the country are returns from sales as promptly remitted as here.

The rule among our commission men is that sales shall be made and proceeds remitted the day the grain arrives.

In order to effect this very desirable object it is essential that the bulk of the work on the tracks shall be done so early in the day that notices of the inspection and samples of the grain may be delivered on 'Change in time for that day's session, and that the work of the office shall be practically over by the time for closing the afternoon mails.

This necessitates a complete telephone service and a much larger force of men upon the tracks and in the office than would be required to do the work if it could be distributed throughout the day.

A source of further increase of expenditure consequent upon present business methods was laid before your honorable board in my report for 1889, and need not be recounted here.

I allude to the large proportion of grain transferred at junction points from western to eastern cars and carried on "through bills of lading" from initial points to the seaboard.

This grain, which does not pass through Chicago elevators, is almost all sold on Chicago certificates; and our inspectors, in order to reach it, are obliged to visit every day from ten to twenty of these junction points at long distances from our regular inspection stations and from each other. This special inspection requires the services of three and often four track inspectors.

As an indication of the extent to which this method of transportation is carried it may be of interest to note that during last year but 46 per cent. of the grain passing through the hands of the department went to the elevators.

The work of the office has been very largely increased also in the matter of certificates. But a few years ago certificates were called for on but a small per centage of the cars inspected, and it was no unusual thing to place thirty to fifty cars upon one certificate.

Now separate certificates, and, in a majority of cases, duplicates are required upon most of the cars inspected.

Yet, notwithstanding the circumstances above noted, our entire expense including every expenditure of every kind for inspection, registration and appeals amounts to but forty-one one-hundredths of a mill per bushel of grain inspected—a point reached but once in the last ten years.

#### REDUCTION OF FEES.

When, a year ago, your honorable board reduced the fees for inspection on arrival from thirty-five to thirty cents per car, I took occasion to say, "In regard to the reduction of fees for inspection on arrival from thirty-five cents to thirty cents, wisely made by your honorable board and which goes into effect at the date of this report, I can only repeat in substance what I said in my letter recommending the same, that while owing to the unusually large receipts during the past two years, the surplus fund of the department is larger than necessary to pay the natural deficit in its expenses during the winter, and may, therefore, properly be returned to the country shippers in the form of a reduction of fees, yet thirty cents per car is inadequate to the maintenance of the department upon a basis of thorough efficiency; and I am convinced that within a year, (or a year and a half at the farthest) it will be found necessary to restore the old rate."

While I see no reason in the general situation to change the views then expressed, still the receipts of grain have been so large that our surplus has slightly increased (notwithstanding the reduction in rates); and as it is now larger than is necessary for the ordinary exigencies of the department, I respectfully recommend that the shippers be given the benefit of the unnecessary surplus by a reduction of the rate, on and after December 1, to twenty-five cents per car.

#### SIZES OF CARS.

In all comparisons of the earlier with the later reports of the department it is necessary to take into careful account the average loading of the cars which has increased since 1877 within a fraction of 75 per cent.

In 1877 the average contents of each car was 416 bushels; in 1878, 451; in 1879, 460; in 1880, 491; in 1881, 520; in 1882, 559; in 1883, 572; in 1884, 601; in 1885, 608; in 1886, 641; in 1887, 673; in 1888, 685; in 1889, 684; in 1890, 727.

From the above figures it will be seen that, at our present loading, the rate of twenty-five cents per car herein recommended, would be equivalent to a rate of but fourteen and one-half cents per car if the average loading of 1877 prevailed.

#### IN CONCLUSION.

I am glad to be able to say that during the year the members of our force have, as a rule, discharged their duties conscientiously and faithfully.

I wish also to acknowledge the hearty and cordial cooperation with which your honorable board has invariably met every recommendation for the improvement of the service, the maintenance of discipline or the preservation of the rights of the trade and the public.

## CLAIMS FOR DAMAGES.

A question of great importance to the trade and one about which great diversity of opinion exists is that of the liability of the department for errors of inspection.

The unanimous opinion of the trade is that the injured party should look to the department for prompt settlement as it looked to the Board of Trade when that body had control of the inspection, and that reimbursement of the department funds should be a matter of adjustment between the Railroad and Warehouse Commission and the inspector.

In the earlier years of the department—in fact, during more than half of its existence, successive boards of Railroad and Warehouse Commissioners took this view of the matter. Claims were promptly paid as soon as substantiated and the amounts assessed against the inspector who made the error when the liability could be clearly fixed, and treated as an expense of the department when it could not.

Later boards, however, have held that there was no sufficient warrant in the law for such use of the department funds, and that the only recourse of the injured party lay in a suit upon the inspector's bond.

Without discussing the relative correctness of these conflicting opinions I beg leave to suggest that your honorable board make some recommendation to the General Assembly soon to convene, looking to a clearer provision of the law on this subject.

As a rule the amounts involved in any one of these claims is small,—so small that the costs of a suit upon the bonds of an inspector would be practically prohibitory, while the time and trouble involved in its collection would be so great that the injured party would prefer the loss to the remedy.

Then, again, in a large proportion of these claims while the loss and the error are clearly proven it is impossible to fix the error upon a particular inspector, or, having done so, to prove his negligence.

Inasmuch as the department collects the fees for inspection, the trade looks to it for a prompt adjustment of its losses, and rightfully so.

It expects us to make good any grade we affix to its grain, and, without this, public confidence in our certificates must be weakened.

My suggestion is that your honorable board recommend an amendment to the law by which just claims may be promptly paid from the funds of the department, leaving it to the Commission to assess the amounts, or such portion of them as may be deemed best for purposes of discipline, against the inspectors.

Very respectfully submitted,

P. BIRD PRICE,

*Chief Inspector.*

[illegible]



## EXHIBIT A—3.

*Inspection on Arrival—By Months.*

| MONTHS.                      | CORN.   |        |        |        |       |        |        |        | TOTAL<br>CARS. |                |
|------------------------------|---------|--------|--------|--------|-------|--------|--------|--------|----------------|----------------|
|                              | Yellow. |        |        | White. |       | 2      | 3      | 4      |                | Not<br>Graded. |
|                              | 1       | 2      | 3      | 2      | 3     |        |        |        |                |                |
| November, 1889 .....         | 1,023   | 871    | 191    | 79     | 2,327 | 2,708  | 814    | 122    | 8,135          |                |
| December, 1889 .....         | 306     | 2,446  | 57     | 200    | 1,092 | 5,896  | 1,585  | 139    | 11,721         |                |
| January, 1890 .....          | 88      | 1,640  | 29     | 200    | 997   | 3,887  | 1,673  | 144    | 8,658          |                |
| February, 1890 .....         | 146     | 1,423  | 41     | 243    | 887   | 3,323  | 1,736  | 193    | 7,992          |                |
| March, 1890 .....            | 1       | 843    | 2,000  | 182    | 325   | 5,338  | 6,920  | 1,178  | 54             |                |
| April, 1890 .....            |         | 598    | 1,499  | 176    | 433   | 2,663  | 4,673  | 812    | 40             |                |
| May, 1890 .....              | 1       | 2,578  | 2,240  | 653    | 751   | 5,584  | 2,732  | 1,028  | 28             |                |
| June, 1890 .....             |         | 2,180  | 1,578  | 676    | 460   | 5,643  | 3,293  | 1,317  | 115            |                |
| July, 1890 .....             |         | 2,141  | 1,238  | 643    | 393   | 5,327  | 2,621  | 1,175  | 176            |                |
| August, 1890 .....           |         | 2,479  | 1,086  | 427    | 287   | 4,761  | 2,130  | 1,068  | 19             |                |
| September, 1890 .....        |         | 2,477  | 1,288  | 466    | 413   | 5,774  | 3,139  | 980    | 21             |                |
| October, 1890 .....          |         | 2,298  | 1,292  | 422    | 403   | 3,874  | 2,642  | 840    | 64             |                |
| Total cars.....              | 2       | 17,157 | 18,601 | 3,963  | 4,187 | 44,267 | 43,964 | 14,206 | 1,115          |                |
| Total estimated bushels..... |         |        |        |        |       |        |        |        | 91,278,978     |                |

## EXHIBIT A—4.

*Inspection on Arrival—By Months.*

| MONTHS.                      | OATS.  |        |        |        |       |                | TOTAL<br>CARS. | RYE.      |       |       |                | TOTAL<br>CARS. |     |
|------------------------------|--------|--------|--------|--------|-------|----------------|----------------|-----------|-------|-------|----------------|----------------|-----|
|                              | White. |        |        | 2      | 3     | Not<br>Graded. |                | 1         | 2     | 3     | Not<br>Graded. |                |     |
|                              | 1      | 2      | 3      |        |       |                |                |           |       |       |                |                |     |
| November, 1889.....          | ...    | 1,075  | 1,824  | 561    | 292   | 18             | 3,770          | ...       | 5     | 354   | 135            | 13             | 507 |
| December, 1889.....          | ...    | 1,156  | 2,008  | 817    | 322   | 8              | 4,311          | ...       | 5     | 401   | 150            | 2              | 558 |
| January, 1890.....           | ...    | 1,187  | 1,861  | 831    | 217   | 6              | 4,132          | ....      | ...   | 348   | 118            | 2              | 468 |
| February, 1890.....          | ...    | 1,302  | 2,115  | 800    | 229   | 7              | 4,453          | ....      | ...   | 281   | 65             | 1              | 347 |
| March, 1890.....             | ...    | 1,190  | 1,766  | 774    | 225   | 6              | 3,961          | ....      | ...   | 167   | 47             | 2              | 216 |
| April, 1890.....             | ...    | 1,815  | 2,638  | 1,050  | 337   | 14             | 5,854          | ...       | 1     | 189   | 83             | 3              | 276 |
| May, 1890.....               | 1      | 4,143  | 4,708  | 2,214  | 519   | 43             | 11,628         | ....      | ...   | 329   | 197            | 3              | 529 |
| June, 1890.....              | ...    | 2,179  | 2,420  | 870    | 323   | 24             | 5,816          | ....      | ...   | 237   | 137            | 21             | 395 |
| July, 1890.....              | ...    | 1,893  | 1,990  | 664    | 336   | 39             | 4,922          | ....      | ...   | 190   | 63             | 3              | 256 |
| August, 1890.....            | ...    | 3,932  | 2,894  | 1,185  | 463   | 24             | 8,498          | ...       | 1     | 472   | 94             | 4              | 571 |
| September, 1890.....         | ...    | 3,274  | 2,486  | 1,059  | 426   | 56             | 7,301          | ....      | ...   | 381   | 70             | 5              | 456 |
| October, 1890.....           | ...    | 1      | 2,853  | 2,856  | 897   | 463            | 7,151          | ....      | ...   | 328   | 67             | 14             | 409 |
| Total cars.....              | 2      | 25,999 | 29,566 | 11,722 | 4,182 | 326            | 71,797         | 12        | 3,677 | 1,226 | 73             | 4,988          |     |
| Total estimated bushels..... |        |        |        |        |       |                | 72,945,752     | 3,012,752 |       |       |                |                |     |

## EXHIBIT A-5.

*Inspection on Arrival—By Months.*

| MONTHS.                       | BARLEY.              |       |                 |       |       |        |       |     |                |        | TOTAL<br>CARS. | GRAND<br>TOTAL.<br><br>Cars of all<br>kinds of<br>Grain. |
|-------------------------------|----------------------|-------|-----------------|-------|-------|--------|-------|-----|----------------|--------|----------------|--|
|                               | Bay<br>Brew-<br>ing. |       | Cheva-<br>lier. |       | 2     | 3      | 4     | 5   | Not<br>Graded. |        |                |  |
|                               | 2                    | 3     | 2               | 3     |       |        |       |     |                |        |                |  |
| November, 1889 .....          | .....                | ..... | .....           | ..... | 4     | 1,265  | 610   | 70  | 19             | 1,968  | 19,723         |  |
| December, 1889 .....          | .....                | ..... | .....           | ..... | 1     | 781    | 531   | 68  | 6              | 1,387  | 21,151         |  |
| January, 1890 .....           | .....                | ..... | .....           | ..... | ..... | 1,000  | 459   | 51  | 5              | 1,515  | 16,503         |  |
| February, 1890 .....          | .....                | ..... | .....           | ..... | ..... | 939    | 400   | 39  | 17             | 1,395  | 15,109         |  |
| March, 1890 .....             | .....                | ..... | .....           | ..... | ..... | 613    | 326   | 20  | 16             | 975    | 23,155         |  |
| April, 1890 .....             | .....                | ..... | .....           | ..... | ..... | 644    | 295   | 28  | 20             | 987    | 19,162         |  |
| May, 1890 .....               | .....                | ..... | .....           | ..... | ..... | 478    | 370   | 35  | 15             | 898    | 30,625         |  |
| June, 1890 .....              | .....                | ..... | .....           | ..... | 2     | 182    | 198   | 35  | 5              | 422    | 23,013         |  |
| July, 1890 .....              | .....                | ..... | .....           | ..... | 3     | 26     | 32    | 13  | 1              | 75     | 21,320         |  |
| August, 1890 .....            | .....                | ..... | .....           | ..... | 12    | 962    | 222   | 11  | 7              | 1,214  | 27,081         |  |
| September, 1890 .....         | 1                    | ..... | 1               | ..... | 31    | 3,308  | 678   | 36  | 49             | 4,104  | 29,833         |  |
| October, 1890 .....           | 1                    | 2     | .....           | ..... | 30    | 3,001  | 839   | 66  | 97             | 4,036  | 26,281         |  |
| Total cars .....              | 2                    | 2     | 1               | ..... | 83    | 13,199 | 4,960 | 472 | 257            | 18,976 | 272,956        |  |
| Total estimated bushels ..... |                      |       |                 |       |       |        |       |     |                |        | 13,378,080     | 198,544,561  |

## EXHIBIT B-1.

*Inspection on Arrival—By Railroads.*

| RAILROADS.             | WINTER WHEAT. |     |    |          |       |       |              |    |             |       |       |       |               |        | TOTAL<br>CARS. |
|------------------------|---------------|-----|----|----------|-------|-------|--------------|----|-------------|-------|-------|-------|---------------|--------|----------------|
|                        | White.        |     |    | Turkish. |       |       | Long<br>Red. |    | Red Winter. |       |       |       |               |        |                |
|                        | 2             | 3   | 4  | 1        | 2     | 3     | 1            | 2  | 1           | 2     | 3     | 4     | Not<br>Grad'd |        |                |
| C., B. & Q.            | 1             | 15  | 6  | 1        | 152   | 104   | ..           | 1  | ..          | 317   | 631   | 139   | 16            | 1,383  |                |
| C., R. I. & P.         | 3             | 5   | 11 | 1        | 304   | 162   | ..           | 2  | ..          | 179   | 313   | 165   | 17            | 1,162  |                |
| C. & A.                | 5             | 14  | 8  | ..       | 209   | 91    | ..           | .. | ..          | 402   | 467   | 197   | 41            | 1,434  |                |
| Ill. Cent.             | 2             | 5   | 3  | ..       | 132   | 62    | ..           | .. | ..          | 128   | 463   | 114   | 24            | 933    |                |
| Galena Div. C. & N. W. | ..            | ..  | .. | ..       | 2     | 2     | ..           | .. | ..          | 13    | 25    | 4     | ..            | 46     |                |
| Wis. Div. C. & N. W.   | 23            | 29  | 25 | ..       | ..    | ..    | ..           | 1  | ..          | 89    | 416   | 30    | 1             | 614    |                |
| Wabash                 | ..            | 2   | 9  | ..       | 195   | 67    | ..           | .. | ..          | 95    | 417   | 216   | 60            | 1,061  |                |
| C. & E. I.             | ..            | 1   | 1  | ..       | ..    | ..    | ..           | .. | 1           | 24    | 68    | 47    | 14            | 156    |                |
| C., M. & St. P.        | 7             | 67  | 19 | ..       | 39    | 12    | ..           | .. | ..          | 219   | 478   | 178   | 7             | 1,026  |                |
| Wis. Cent.             | ..            | 2   | .. | ..       | ..    | ..    | ..           | .. | ..          | ..    | 3     | ..    | ..            | 5      |                |
| C., St. P. & K. C.     | ..            | 6   | 4  | ..       | 286   | 42    | ..           | 1  | ..          | 61    | 45    | 54    | 11            | 510    |                |
| A., T. & S. Fe.        | 1             | 5   | 5  | 1        | 1,542 | 421   | ..           | .. | ..          | 268   | 862   | 324   | 83            | 3,512  |                |
| Through and special... | 6             | 30  | 1  | ..       | 194   | 147   | ..           | .. | ..          | 787   | 1,360 | 488   | 69            | 3,082  |                |
| Total cars .....       | 48            | 181 | 92 | 3        | 3,055 | 1,110 | ..           | 2  | 4           | 2,582 | 5,548 | 1,956 | 343           | 14,924 |                |

## EXHIBIT B—2.

*Inspection on Arrival—By Railroads.*

| RAILROADS.             | SPRING WHEAT.   |   |      |       |       |       |            |        |     |    | MIXED WHEAT. |        | TOTAL CARS. |
|------------------------|-----------------|---|------|-------|-------|-------|------------|--------|-----|----|--------------|--------|-------------|
|                        | Colorado Wheat. |   | Hard | 2     | 3     | 4     | Not Graded | White. |     | 2  | 3            |        |             |
|                        | 2               | 3 |      |       |       |       |            | 2      | 3   |    |              |        |             |
| C., B. & Q.            | 2               |   | 2    | 312   | 1,039 | 839   | 76         | 3      | 389 | 6  | 36           | 2,704  |             |
| C., R. I. & P.         |                 |   |      | 296   | 215   | 151   | 12         | 1      | 58  |    | 5            | 738    |             |
| C. & A.                |                 |   |      |       | 1     | 8     |            |        | 5   |    |              | 14     |             |
| Ill. Cent.             |                 |   |      | 100   | 162   | 16    | 11         |        |     |    | 5            | 294    |             |
| Galena Div. C. & N. W. |                 |   |      | 169   | 922   | 323   | 18         | 3      | 42  |    | 4            | 1,481  |             |
| Wis. Div. C. & N. W.   |                 |   |      | 278   | 169   | 41    | 1          | 2      | 10  |    |              | 501    |             |
| Wabash                 |                 |   |      | 3     | 4     | 2     |            |        | 10  |    |              | 9      |             |
| C. & E. I.             |                 |   |      |       |       | 2     |            |        |     |    |              | 2      |             |
| C., M. & St. P.        | 1               | 1 |      | 2,761 | 993   | 227   | 34         | 2      | 46  | 5  | 30           | 4,100  |             |
| Wis. Cent.             | 8               | 2 |      | 4     | 46    | 7     | 12         |        |     |    | 1            | 70     |             |
| C., St. P. & K. C.     | 1               | 4 | 1    | 237   | 340   | 109   | 3          | 4      | 28  |    |              | 727    |             |
| A., T. & S. Fe.        | 2               |   |      | 3     | 15    | 26    | 10         |        | 16  | 1  | 1            | 74     |             |
| Through and special    |                 |   | 1    | 3,266 | 653   | 130   | 20         | 1      | 21  | 2  | 1            | 4,095  |             |
| Total cars             | 14              | 7 | 4    | 7,429 | 4,559 | 1,881 | 187        | 16     | 615 | 14 | 83           | 14,809 |             |

## EXHIBIT B—3.

*Inspection on Arrival—By Railroads.*

| RAILROADS.               | CORN.   |        |        |        |       |        |        |        |            | TOTAL<br>CARS. |
|--------------------------|---------|--------|--------|--------|-------|--------|--------|--------|------------|----------------|
|                          | Yellow. |        |        | White. |       | 2      | 3      | 4      | Not Graded |                |
|                          | 1       | 2      | 3      | 2      | 3     |        |        |        |            |                |
| C., B. & Q.....          | 1       | 3,821  | 4,506  | 829    | 666   | 9,004  | 12,017 | 1,861  | 52         | 32,757         |
| C., R. I. & P.....       | 1       | 2,213  | 1,713  | 361    | 230   | 10,309 | 7,935  | 986    | 96         | 23,844         |
| C. & A.....              | 1       | 859    | 929    | 475    | 281   | 2,585  | 1,460  | 848    | 42         | 7,479          |
| Ill. Cent.....           | 1       | 2,953  | 1,941  | 672    | 618   | 2,588  | 1,679  | 1,876  | 257        | 12,584         |
| Gal. Div. C. & N. W..... | 1       | 1,618  | 1,408  | 59     | 143   | 3,209  | 3,160  | 668    | 21         | 10,286         |
| Wis. Div. C. & N. W..... | 1       | 8      | 2      | 6      | 2     | 1      | 1      | 1      | 1          | 21             |
| Waba-h.....              | 1       | 806    | 756    | 219    | 455   | 535    | 778    | 1,305  | 123        | 4,977          |
| C. & E. I.....           | 1       | 14     | 24     | 18     | 25    | 9      | 41     | 126    | 57         | 314            |
| C., M. & St. P.....      | 1       | 1,271  | 732    | 112    | 88    | 4,152  | 2,587  | 482    | 46         | 9,470          |
| Wis. Cent.....           | 1       | .....  | .....  | .....  | ..... | .....  | 1      | .....  | .....      | 1              |
| C., St. P. & K. C.....   | 1       | 703    | 474    | 151    | 108   | 4,014  | 2,691  | 286    | 31         | 8,458          |
| A., T. & S. Fe.....      | 1       | 1,058  | 1,082  | 449    | 203   | 5,843  | 4,117  | 645    | 47         | 13,534         |
| Through and special..... | 1       | 1,833  | 5,034  | 612    | 1,278 | 2,018  | 7,497  | 5,122  | 343        | 23,737         |
| Total cars.....          | 2       | 17,157 | 18,601 | 3,963  | 4,187 | 44,267 | 43,964 | 14,206 | 1,115      | 147,462        |

## EXHIBIT B—4.

*Inspection on Arrival—By Railroads.*

| RAILROADS.           | OATS.  |        |        |        |       |            | TOTAL<br>CARS. | RYE. |       |       |            | TOTAL<br>CARS. |
|----------------------|--------|--------|--------|--------|-------|------------|----------------|------|-------|-------|------------|----------------|
|                      | White. |        |        | 2      | 3     | Not Grad'd |                | 1    | 2     | 3     | Not Grad'd |                |
|                      | 1      | 2      | 3      |        |       |            |                |      |       |       |            |                |
| C. B. & Q.           |        | 4,542  | 2,70   | 1,610  | 417   | 37         | 9,326          | .... | 880   | 342   | 20         | 1,242          |
| C. R. I. & P.        | 1      | 3,446  | 5,491  | 548    | 486   | 71         | 10,043         | 1    | 396   | 221   | 14         | 632            |
| C. & A.              |        | 372    | 691    | 496    | 75    | 19         | 1,653          | .... | 98    | 30    | 2          | 130            |
| Ill. Cent.           |        | 1,655  | 2,002  | 1,555  | 402   | 18         | 5,632          | .... | 293   | 71    | ....       | 364            |
| Gal. Div. C. & N. W. | 1      | 2,975  | 3,934  | 1,051  | 473   | 48         | 8,482          | 2    | 453   | 116   | 1          | 572            |
| Wis. Div. C. & N. W. |        | 1,517  | 744    | 186    | 60    | 10         | 2,517          | .... | 231   | 22    | ....       | 255            |
| Wabash               |        | 140    | 429    | 193    | 124   | 8          | 894            | .... | 56    | 30    | 3          | 89             |
| C. & E. I.           |        | 4      | 60     | 35     | 46    | 6          | 151            | .... | 10    | 8     | ....       | 20             |
| C. M. & St. P.       |        | 6,484  | 4,598  | 1,365  | 517   | 47         | 13,011         | 9    | 642   | 132   | 5          | 788            |
| Wis. Cent.           |        | ....   | 81     | 1      | 10    | ....       | 92             | .... | 5     | 2     | 1          | 8              |
| C. St. & K. C.       |        | 814    | 1,314  | 566    | 258   | 5          | 2,957          | .... | 99    | 69    | ....       | 168            |
| A. T. & S. Fe.       |        | 719    | 765    | 750    | 186   | 14         | 2,434          | .... | 64    | 30    | 1          | 95             |
| Through and special. |        | 3,331  | 6,737  | 3,366  | 1,128 | 43         | 14,605         | .... | 450   | 153   | 22         | 625            |
| Total cars.          | 2      | 25,999 | 29,566 | 11,722 | 4,182 | 326        | 71,797         | 12   | 3,677 | 1,226 | 73         | 4,988          |

## EXHIBIT B—5.

*Inspection on Arrival—By Railroads.*

| RAILROADS.                   | BARLEY.              |   |                 |   |    |        |       |     |            |        | Total cars . . . . | Grand total<br>cars of all<br>kinds of grain |
|------------------------------|----------------------|---|-----------------|---|----|--------|-------|-----|------------|--------|--------------------|--|
|                              | Bay<br>Brew-<br>ing. |   | Chev-<br>alier. |   | 2  | 3      | 4     | 5   | Not graded |        |                    |  |
|                              | 2                    | 3 | 2               | 3 |    |        |       |     |            |        |                    |  |
| C. B. & Q. . . . .           |                      |   |                 |   | 17 | 653    | 302   | 43  | 6          | 1,021  | 48,433             |  |
| C. R. I. & P. . . . .        |                      |   |                 |   | 24 | 1,213  | 637   | 108 | 31         | 2,013  | 38,432             |  |
| C. & A. . . . .              |                      |   |                 |   | 1  | 5      | 5     |     |            | 11     | 10,721             |  |
| Ill. Central . . . . .       |                      |   |                 |   |    | 837    | 1,111 | 69  | 8          | 2,025  | 21,832             |  |
| Gal. Div. C. & N. W. . . . . |                      |   |                 |   | 9  | 3,559  | 906   | 46  | 17         | 4,537  | 25,404             |  |
| Mo. Div. C. & N. W. . . . .  |                      |   |                 |   | 3  | 2,628  | 382   | 48  | 110        | 3,171  | 7,079              |  |
| Wabash . . . . .             |                      |   |                 |   |    | 2      | 7     |     |            | 9      | 7,039              |  |
| C. & E. I. . . . .           |                      |   |                 |   |    |        |       |     | 2          | 2      | 645                |  |
| C. M. & St. P. . . . .       |                      |   |                 |   | 3  | 3,617  | 1,008 | 78  | 73         | 4,779  | 33,174             |  |
| Wis. Central . . . . .       | 2                    | 2 | 1               |   |    | 113    | 29    | 2   |            | 149    | 325                |  |
| C. St. P. & K. C. . . . .    |                      |   |                 |   | 1  | 310    | 177   | 3   |            | 491    | 13,311             |  |
| A. T. & S. Fe. . . . .       |                      |   |                 |   |    | 6      | 5     |     |            | 11     | 19,660             |  |
| Through and special. . . . . |                      |   |                 |   | 25 | 256    | 391   | 73  | 12         | 757    | 46,901             |  |
| Total cars. . . . .          | 2                    | 2 | 1               |   | 83 | 13,199 | 4,960 | 472 | 257        | 18,976 | 272,956            |  |

| MONTHS.               | WINTER WHEAT. |             |        |       |               |                        | SPRING WHEAT. |        |                        |
|-----------------------|---------------|-------------|--------|-------|---------------|------------------------|---------------|--------|------------------------|
|                       | Turk-<br>ish. | Red Winter. |        |       |               | Total<br>bush-<br>cls. | 2             | 3      | Total<br>bush-<br>cls. |
|                       | 3             | 2           | 3      | 4     | Not<br>graded |                        |               |        |                        |
| November, 1889 .....  |               | 4,296       |        | 5,000 |               | 9,296                  |               |        |                        |
| December, 1889 .....  |               | 7,964       | 7,400  |       |               | 15,364                 | 61,966        |        | 61,966                 |
| March, 1890 .....     |               |             |        |       |               |                        | 17,526        |        | 17,526                 |
| April, 1890 .....     |               |             | 53,102 | 400   |               | 53,502                 | 97,869        |        | 97,869                 |
| May, 1890 .....       |               |             | 18,800 |       |               | 18,800                 | 104,994       | 24,873 | 129,867                |
| June, 1890 .....      |               |             |        |       |               |                        | 16,250        | 9,079  | 25,329                 |
| July, 1890 .....      |               |             |        |       |               |                        |               | 58,100 | 58,100                 |
| August, 1890 .....    | 8,000         |             |        |       |               | 8,000                  |               |        |                        |
| September, 1890 ..... | 7,500         |             | 7,471  |       |               | 14,971                 |               |        |                        |
| October, 1890 .....   |               |             | 3,641  |       | 3,300         | 6,941                  |               |        |                        |
| Total bushels ..      | 15,500        | 12,260      | 90,414 | 5,400 | 3,300         | 126,874                | 298,605       | 92,052 | 390,657                |

*Inspection on Arrival—By Canal and Lake—Bushels.*

| MONTHS.         | CORN.   |         |        |       |           |           |         |               |                        |
|-----------------|---------|---------|--------|-------|-----------|-----------|---------|---------------|------------------------|
|                 | Yellow. |         | White. |       | 2         | 3         | 4       | Not<br>graded | Total<br>bush-<br>els. |
|                 | 2       | 3       | 2      | 3     |           |           |         |               |                        |
| November, 1889  | .....   | .....   | .....  | ..... | 84,150    | 16,500    | .....   | .....         | 100,650                |
| December, 1889  | .....   | .....   | .....  | ..... | .....     | 4,500     | .....   | .....         | 4,500                  |
| March, 1890     | .....   | .....   | .....  | ..... | .....     | 75,411    | .....   | .....         | 75,411                 |
| April, 1890     | .....   | 3,500   | .....  | ..... | 149,891   | 203,954   | 19,900  | .....         | 377,245                |
| May, 1890       | .....   | .....   | 5,700  | ..... | .....     | 227,800   | 900     | .....         | 234,400                |
| June, 1890      | 31,511  | 23,035  | 4,200  | ..... | 354,717   | 52,000    | 1,800   | .....         | 467,263                |
| July, 1890      | .....   | 42,402  | .....  | ..... | 371,143   | 128,528   | 27,264  | .....         | 569,337                |
| August, 1890    | 44,777  | 8,100   | .....  | ..... | 348,509   | 169,553   | 76,029  | 6,705         | 653,673                |
| September, 1890 | 80,536  | 68,500  | .....  | ..... | 498,762   | 187,700   | .....   | .....         | 835,498                |
| October, 1890   | 10,100  | 8,500   | .....  | 6,100 | 262,400   | 102,565   | .....   | 5,000         | 394,665                |
| Total bushels.  | 166,924 | 154,037 | 9,900  | 6,100 | 2,069,572 | 1,168,511 | 125,893 | 11,705        | 3,712,642              |



*Exhibit C—Continued.**Inspection on Arrival—By Canal and Lake—Bushels.*

| MONTHS.                     | OATS.     |         |         |        |                 | RYE.   |       |                 | Grand total bush-cls. |
|-----------------------------|-----------|---------|---------|--------|-----------------|--------|-------|-----------------|-----------------------|
|                             | White.    |         | 2       | 3      | Total bush-cls. | 2      | 3     | Total bush-cls. |                       |
|                             | 2         | 2       |         |        |                 |        |       |                 |                       |
| November, 1889              |           | 35,500  | 17,000  | 2,000  | 54,500          | .....  | 5,585 | 5,585           | 170,031               |
| December, 1889              |           |         |         |        |                 |        |       |                 | 81,830                |
| March, 1890                 | 18,970    | 5,347   | 70,222  |        | 94,539          |        |       |                 | 187,476               |
| April, 1890                 |           | 66,000  | 1,600   | 8,600  | 76,200          | 13,300 |       | 13,300          | 618,116               |
| May, 1890                   | 395,427   | 130,500 | 119,393 |        | 645,320         | 19,550 | 125   | 19,675          | 1,048,062             |
| June, 1890                  | 316,432   | 74,450  | 16,500  |        | 407,382         | 22,490 |       | 22,490          | 922,464               |
| July, 1890                  | 175,519   | 12,700  | 12,800  |        | 201,019         | 11,259 |       | 11,259          | 839,715               |
| August, 1890                | 71,500    | 18,600  |         | 1,700  | 91,800          |        |       |                 | 753,473               |
| September, 1890             | 23,130    | 30,200  | 21,500  |        | 74,830          | 68     |       | 68              | 925,367               |
| October, 1890               |           | 14,000  |         |        | 14,000          |        |       |                 | 415,606               |
| Total bushels ....          | 1,000,978 | 387,297 | 259,015 | 12,300 | 1,659,590       | 66,667 | 5,710 | 72,377          | 5,962,140             |
| Total number of boats ..... |           |         |         |        |                 |        |       |                 | 610                   |

## EXHIBIT D.

*Inspection from Store.*

|                   | Winter wheat. | Spring wheat. | Corn.      | Oats.      | Rye.      | Barley.   | Total.     |
|-------------------|---------------|---------------|------------|------------|-----------|-----------|------------|
|                   | Bushels.      | Bushels.      | Bushels.   | Bushels.   | Bushels.  | Bushels.  | Bushels.   |
| November, 1889..  | 585,821       | 95,583        | 3,843,186  | 2,030,714  | 247,754   | 337,123   | 7,140,181  |
| December, 1889..  | 128,802       | 221,976       | 650,160    | 329,276    | 123,233   | 120,326   | 1,573,773  |
| January, 1890.... | 157,391       | 313,978       | 231,438    | 3-7,297    | 71,782    | 160,792   | 1,322,678  |
| February, 1890..  | 161,385       | 482,496       | 323,229    | 162,056    | 14,244    | 113,126   | 1,256,536  |
| March, 1890.....  | 396,540       | 299,033       | 1,541,851  | 189,506    | 83,726    | 98,100    | 2,608,756  |
| April, 1890.....  | 253,670       | 431,864       | 8,595,147  | 1,451,870  | 245,850   | 127,863   | 11,106,264 |
| May, 1890.....    | 143,448       | 131,822       | 6,467,687  | 3,736,412  | 277,580   | 117,985   | 10,874,934 |
| June, 1890.....   | 270,353       | 153,731       | 7,233,948  | 3,810,929  | 303,305   | 82,304    | 11,854,570 |
| July, 1890.....   | 421,397       | 817,931       | 8,286,837  | 1,210,394  | 114,454   | 1,720     | 10,852,733 |
| August, 1890..... | 787,529       | 321,521       | 6,262,793  | 986,034    | 26,223    | 4,459     | 8,388,559  |
| September, 1890.. | 236,441       | 587,889       | 7,394,220  | 1,405,709  | 67,904    | 82,281    | 9,774,444  |
| October, 1890.... | 565,691       | 232,647       | 6,455,038  | 1,139,646  | 90,198    | 507,760   | 8,990,980  |
| Total.....        | 4,108,468     | 4,090,471     | 57,285,534 | 16,839,843 | 1,666,253 | 1,753,839 | 85,744,408 |

EXHIBIT E.  
*Financial Statement.*

|                    | Inspection<br>Fees Earned. | Commissions<br>paid Rail-<br>roads and<br>Elevators. | Total Cash<br>Received. | Disburse-<br>ments for<br>Expenses. | Bank<br>Balance. |
|--------------------|----------------------------|--|-------------------------|-------------------------------------|------------------|
| November, 1889...  | \$9,540 70                 | \$736 66   | \$14,023 01             | \$10,831 04                         | \$59,728 80      |
| December, 1889...  | 7,108 88                   | 442 52   | 9,489 48                | 10,168 82                           | 59,049 46        |
| January, 1890..... | 5,607 62                   | 257 73   | 7,088 32                | 9,920 78                            | 56,217 00        |
| February, 1890.... | 5,129 53                   | 187 69   | 5,231 04                | 10,228 73                           | 51,219 31        |
| March, 1890.....   | 8,105 95                   | 176 64   | 4,977 31                | 9,662 20                            | 46,534 42        |
| April, 1890.....   | 11,482 52                  | 373 10   | 8,441 13                | 9,483 70                            | 45,491 85        |
| May, 1890.....     | 14,964 56                  | 517 02   | 10,973 14               | 9,402 51                            | 47,062 48        |
| June, 1890.....    | 13,144 00                  | 640 85   | 13,810 71               | 9,641 25                            | 51,231 94        |
| July, 1890.....    | 12,225 22                  | 628 92   | 12,950 94               | 10,100 91                           | 54,081 97        |
| August, 1890.....  | 12,531 08                  | 561 14   | 11,680 85               | 9,940 83                            | 55,821 99        |
| September, 1890..  | 14,189 14                  | 556 80   | 11,823 87               | 9,887 63                            | 57,758 23        |
| October, 1890..... | 12,622 69                  | 641 72   | 13,432 51               | 9,897 92                            | 61,292 82        |
| Totals .....       | \$126,651 89               | \$5,720 79   | \$123,922 31            | \$119,166 32                        | .....            |

*P. Bird Price, Chief Inspector,*

IN ACCOUNT WITH ILLINOIS STATE GRAIN INSPECTION DEPARTMENT.

|                      |  |              |              |
|----------------------|--|--------------|--------------|
| November 1, 1889..   | To balance on hand as per last report.....       | \$56,536 33  |              |
| October 31, 1890.... | To cash received during the year as shown above. | 123,922 31   |              |
| October 31, 1890.... | By expense Inspection Department.....            |              | \$99,868 36  |
| October 31, 1890.... | By expense Registration Office.....              |              | 14,566 31    |
| October 31, 1890.... | By expense Committee of Appeals.....             |              | 4,731 65     |
|                      | By balance on hand.....                          |              | 61,292 82    |
|                      | Total.....                                       | \$180,459 14 | \$180,459 14 |

## EXHIBIT F.

## INSPECTION ON ARRIVAL.—Comparative Statement of Inspection from 1880 to 1890, inclusive.

| Year.     | Cars.<br>Number. | Boats.<br>Number. | Winter wheat.<br>Bushels. | Spring wheat.<br>Bushels. | Corn.<br>Bushels. | Oats.<br>Bushels. | Rye.<br>Bushels. | Barley.<br>Bushels. | Total.<br>Bushels. |
|-----------|------------------|-------------------|---------------------------|---------------------------|-------------------|-------------------|------------------|---------------------|--------------------|
| 1880..... | 270,524          | 1,022             | 5,887,500                 | 17,312,968                | 91,185,379        | 18,873,400        | 1,645,545        | 3,991,576           | 138,896,368        |
| 1881..... | 227,119          | 950               | 1,682,311                 | 18,398,187                | 76,017,132        | 22,612,368        | 1,221,843        | 4,177,702           | 124,101,603        |
| 1882..... | 171,218          | 607               | 11,157,238                | 9,508,301                 | 45,775,863        | 25,060,350        | 1,688,397        | 5,803,804           | 99,083,953         |
| 1883..... | 235,213          | 477               | 6,953,031                 | 13,010,095                | 72,258,580        | 33,392,184        | 4,980,000        | 6,824,316           | 137,418,846        |
| 1884..... | 210,822          | 351               | 7,163,624                 | 16,782,273                | 54,600,598        | 30,593,860        | 3,752,180        | 6,755,837           | 125,648,862        |
| 1885..... | 212,270          | 460               | 5,354,848                 | 24,024,672                | 56,709,685        | 38,851,040        | 1,798,951        | 8,032,764           | 131,779,960        |
| 1886..... | 201,103          | 450               | 5,506,084                 | 10,644,844                | 68,477,686        | 42,534,082        | 1,104,396        | 10,202,960          | 131,529,452        |
| 1887..... | 189,120          | 503               | 5,639,573                 | 17,667,973                | 56,700,475        | 45,974,724        | 1,852,324        | 9,462,000           | 130,297,069        |
| 1888..... | 211,818          | 341               | 7,265,135                 | 10,191,034                | 66,391,548        | 52,617,987        | 2,357,792        | 8,521,344           | 147,841,840        |
| 1889..... | 243,883          | 362               | 13,693,185                | 4,634,590                 | 84,775,590        | 58,768,512        | 2,570,410        | 9,296,163           | 173,670,447        |
| 1890..... | 272,956          | 610               | 9,126,046                 | 9,326,484                 | 94,391,620        | 74,605,312        | 3,085,129        | 13,378,080          | 204,506,701        |

## EXHIBIT G.

## INSPECTION FROM STORE—Comparative Statement of Out-Inspection from 1881 to 1890, inclusive.

| Year.      | Winter wheat.<br>Bushels. | Spring wheat.<br>Bushels. | Corn.<br>Bushels. | Oats.<br>Bushels. | Rye.<br>Bushels. | Barley.<br>Bushels. | Total.<br>Bushels. | Combined<br>totals of<br>in and out-<br>inspection.<br>Bushels. |
|------------|---------------------------|---------------------------|-------------------|-------------------|------------------|---------------------|--------------------|---|
| 1881 ..... | 1,719,720                 | 13,675,941                | 60,285,410        | 9,421,724         | 705,241          | 776,858             | 86,584,894         | 210,694,497   |
| 1882 ..... | 9,429,565                 | 7,434,783                 | 38,157,208        | 5,626,482         | 1,091,137        | 1,236,391           | 62,975,366         | 158,668,139   |
| 1883 ..... | 5,201,303                 | 5,854,521                 | 52,391,148        | 6,415,597         | 3,190,923        | 744,086             | 73,797,578         | 211,216,444   |
| 1884 ..... | 4,441,460                 | 12,996,124                | 30,667,783        | 6,621,698         | 2,837,022        | 1,266,691           | 58,830,778         | 187,479,140   |
| 1885 ..... | 1,501,665                 | 7,715,030                 | 31,661,591        | 3,665,637         | 738,209          | 296,790             | 45,578,922         | 177,358,882   |
| 1886 ..... | 2,648,956                 | 10,500,918                | 41,645,620        | 4,763,724         | 635,174          | 1,052,913           | 61,219,305         | 192,778,757   |
| 1887 ..... | 6,019,271                 | 17,642,628                | 39,843,323        | 10,153,370        | 394,948          | 1,044,871           | 75,098,411         | 295,395,480   |
| 1888 ..... | 3,060,541                 | 6,365,790                 | 46,754,284        | 14,818,254        | 516,942          | 1,157,523           | 72,673,334         | 217,890,263   |
| 1889 ..... | 9,136,010                 | 3,637,232                 | 66,517,282        | 20,668,131        | 1,778,321        | 1,399,573           | 103,156,949        | 276,827,396   |
| 1890 ..... | 4,108,468                 | 4,090,471                 | 57,285,534        | 16,839,843        | 1,666,253        | 1,753,839           | 85,744,408         | 290,251,109   |

## RULES

### GOVERNING THE INSPECTION OF GRAIN IN THE CITY OF CHICAGO, STATE OF ILLINOIS.

- IN FORCE DECEMBER 1, 1890.

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#### RULE 1.—WINTER WHEAT.

No. 1 White Winter Wheat—shall be pure White Winter Wheat, or Red and White mixed: sound, plump, and well cleaned.

No. 2 White Winter Wheat—shall be White Winter Wheat, or Red and White mixed: sound and reasonably clean.

No. 3 White Winter Wheat—shall include White Winter Wheat, or Red and White mixed, not clean and plump enough for No. 2, but weighing not less than fifty-four pounds to the measured bushel.

No. 4 White Winter Wheat—shall include White Winter Wheat, damp, musty, or from any cause so badly damaged as to render it unfit for No. 3.

No. 1 Long Red Winter Wheat—shall be pure Red Winter Wheat of the long-berried varieties: sound, plump, and well cleaned.

No. 2 Long Red Winter Wheat—shall be of the same varieties as No. 1, sound and reasonably clean.

Turkish Red Winter Wheat—The grades of Nos. 1, 2 and 3 Turkish Red Winter Wheat shall correspond with the grades of Nos. 1, 2 and 3 Red Winter Wheat, except that they shall be of the Turkish variety.

In case of mixture of Turkish Red Winter Wheat with Red Winter Wheat, it shall be graded according to the quality thereof, and classed as Turkish Wheat.

No. 1 Red Winter Wheat—shall be pure Red Winter Wheat of both light and dark colors, of the shorter-berried varieties: sound, plump, and well cleaned.

No. 2 Red Winter Wheat—shall be Red Winter Wheat of both light and dark colors; sound and reasonably clean.

No. 3 Red Winter Wheat—shall include Red Winter Wheat not clean and plump enough for No. 2, but weighing not less than fifty-four pounds to the measured bushel.

No. 4 Red Winter Wheat—shall include Red Winter Wheat, damp, musty, or from any cause so badly damaged as to render it unfit for No. 3.

In case of the mixture of Red and White Winter Wheat, it shall be graded according to the quality thereof, and classed as White Winter Wheat.



No. 1 Colorado Wheat—shall be sound, plump and well cleaned.

No. 2 Colorado Wheat—shall be sound, reasonably clean, and of good milling quality.

No. 3 Colorado Wheat—shall include Colorado Wheat, not clean and plump enough for No. 2, but weighing not less than fifty-four pounds to the measured bushel.

#### RULE 2.—SPRING WHEAT.

No. 1 Hard Spring Wheat—shall be sound, plump, and well cleaned.

No. 2 Hard Spring Wheat—shall be sound, reasonably clean, and of good milling quality.

No. 1 Spring Wheat—shall be sound, plump, and well cleaned.

No. 2 Spring Wheat—shall be sound, reasonably clean, and of good milling quality.

No. 3 Spring Wheat—shall include all inferior, shrunken or dirty Spring Wheat, weighing not less than fifty-three pounds to the measured bushel.

No. 4 Spring Wheat—shall include Spring Wheat damp, musty, grown, badly bleached, or for any cause which renders it unfit for No. 3.

White Spring Wheat—The grades of Nos. 1, 2 and 3 White Spring Wheat shall correspond with the grades of Nos. 1, 2 and 3 Spring Wheat, except that they shall be of the White variety, or shall contain 5 per cent., or more, of such White Wheat.

Black Sea and Flinty Puff Wheat—shall in no case be inspected higher than No. 2, and Rice Wheat no higher than No. 4.

#### RULE 2½.—MIXED WHEAT.

The grades of Nos. 2 and 3 Mixed Wheat shall be equal in quality to the grades of Nos. 2 and 3 Red Winter Wheat, except that they shall include mixtures of Spring and Winter Wheat.

#### RULE 3.—CORN.

No. 1 Yellow Corn—shall be yellow, sound, dry, plump and well cleaned.

No. 2 Yellow Corn—shall be three-fourths yellow, dry, reasonably clean, but not plump enough for No. 1.

No. 3 Yellow Corn—shall be three-fourths yellow, reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

No. 1 White Corn—shall be sound, dry, plump, and well cleaned.

No. 2 White Corn—shall be seven-eighths white, dry, reasonably clean, but not plump enough for No. 1.

No. 3 White Corn—shall be seven-eighths white, reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

No. 1 Corn—shall be Mixed Corn, of choice quality, sound, dry, and well cleaned.

No. 2 Corn—shall be Mixed Corn, dry, reasonably clean, but not good enough for No. 1.

No. 3 Corn—shall be Mixed Corn, reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

No. 4 Corn—shall include all Corn not wet or in heating condition that is unfit to grade No. 3.

## RULE 4.—OATS.

No. 1 White Oats—shall be white, sound, clean, and reasonably free from other grain.

No. 2 White Oats—shall be seven-eighths white, sweet, reasonably clean, and reasonably free from other grain.

No. 3 White Oats—shall be seven-eighths white, but not sufficiently sound and clean for No. 2.

No. 1 Oats—shall be Mixed Oats, sound, clean, and reasonably free from other grain.

No. 2 Oats—shall be sweet, reasonably clean, and reasonably free from other grain.

No. 3 Oats—shall be all Oats that are damp, unsound, dirty, or from any other cause unfit for No. 2.

## RULE 5.—RYE.

No. 1 Rye—shall be sound, plump and well cleaned.

No. 2 Rye—shall be sound, reasonably clean, and reasonably free from other grain.

No. 3 Rye—All Rye damp, musty, dirty, or from any cause unfit for No. 2, shall be graded as No. 3.

## RULE 6.—BARLEY.

No. 1 Barley—shall be plump, bright, clean, and free from other grain.

No. 2 Barley—shall be sound, of healthy color, not plump enough for No. 1, reasonably clean and reasonably free from other grain.

No. 3 Barley—shall include slightly shrunken and otherwise slightly damaged Barley, not good enough for No. 2.

No. 4 Barley—shall include all Barley fit for malting purposes, not good enough for No. 3.

No. 5 Barley—shall include all Barley which is badly damaged, or from any cause unfit for malting purposes, except that Barley which has been chemically treated shall not be graded at all.

Scotch Barley—The grades of Nos. 1, 2 and 3 Scotch Barley shall correspond in all respects with the grades of Nos. 1, 2 and 3 Barley, except that they shall be of the Scotch variety.

Bay Brewing Barley—The grades of Nos. 1, 2 and 3 Bay Brewing Barley shall conform in all respects to the grades of Nos. 1, 2 and 3 Barley, except that they shall be of the Bay Brewing variety grown in the territories and on the Pacific Coast.

Chevalier Barley—The grades of Nos. 1, 2 and 3, Chevalier Barley shall conform in all respects to the grades of Nos. 1, 2 and 3 Barley, except that they shall be of the Chevalier variety grown in the territories and on the Pacific Coast.

## RULE 7.

The word "new" shall be inserted in each certificate of inspection of a newly harvested crop of Oats until the 15th of August; of Rye until the 1st day of September; of Wheat until the 1st day of November, and of Barley until the 1st day of May of each year. This change shall be construed as establishing a new grade for the time specified, to conform in every particular to the existing grades of grain, excepting the distinctions of "new" and "old."

## RULE 8.

All grain that is warm, or that is in a heating condition, or is otherwise unfit for warehousing, shall not be graded.

## RULE 9.

All inspectors shall make their reasons for grading grain, when necessary fully known by notations on their books. The weight alone shall not determine the grade.

## RULE 10.

Each inspector is required to ascertain the weight per measured bushel of each lot of wheat inspected by him, and note the same on his book.

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## RULE I.—HOURS OF SERVICE.

Assistant Inspectors and Helpers will be at their posts and ready for business at the railroad tracks, or at the elevators to which they are assigned, from 7 o'clock A. M. until 6 o'clock P. M. of each day, from the 15th day of March to the 15th day of November, and from 8 o'clock A. M. until 5 o'clock P. M. during the remainder of the year.

## RULE II.—EARLIER HOURS.

When the receipts are large and the interests of the trade require an earlier inspection, all Assistant Inspectors and Helpers assigned to duty on the track will begin work at as early an hour as practicable.

## RULE III.—EVENING WORK.

Inspectors stationed at elevators will, when necessary to complete the cargo or shipment upon which they may be engaged, remain on duty as late in the evening as they can see to inspect grain safely.

## RULE IV.—WET WEATHER AND DARKNESS.

No Inspector stationed at an elevator is authorized to inspect out of store after dark or in wet weather, except on receipt, personally, or through the office of the Chief Inspector, of an order written upon the printed blanks, furnished by the Department, filled and signed by the owner of the grain, or his authorized agent, relieving such inspector of all responsibility for damage which may be caused by such wet weather, or loss by such errors as are liable to occur by reason of darkness; but in every case the Inspector must be personally present when the grain is actually delivered on board, making his report of the inspection after such actual delivery.

The Chief Inspector of Grain is hereby authorized to collect on and after November 1, 1889, on all grain inspected under his direction as follows:

For in-inspection, 25 cents per car-load; 10 cents per wagon or cart load; 40 cents per 1,000 bushels from canal boats;  $\frac{1}{4}$  of 1 cent per bushel from bags.

For out-inspection, 50 cents per 1,000 bushels to vessels; 35 cents per car-load to cars; 35 cents per car-load to teams; or 10 cents per wagon load to teams.

P. BIRD PRICE, *Chief Inspector.*

## EXTRACT FROM THE RULES

PRESCRIBED BY THE BOARD OF RAILROAD AND WAREHOUSE COMMISSIONERS  
FOR THE ADMINISTRATION OF THE DEPARTMENTS OF GRAIN INSPEC-  
TION AND WAREHOUSE REGISTRATION IN THE CITY OF CHI-  
CAGO, AND IN FORCE FROM AND AFTER DEC. 3, 1887.

No claim for damages on account of error in the inspection of any lot of grain (except grain inspected from public warehouses in accordance with law) will be entertained or allowed by the Board of Railroad and Warehouse Commissioners, unless complaint of such inspection shall be made to the Chief Inspector before the grain in question shall be removed from the car in which it is inspected, or before it shall leave the jurisdiction of the Department.

Grain transferred from the car in which it was inspected to another, must be inspected after transfer, to entitle the owner to have any claim arising thereunder considered by the Board of Railroad and Warehouse Commissioners.

## REPORT OF WAREHOUSE REGISTRAR.

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OFFICE OF WAREHOUSE REGISTRAR,  
CHICAGO, ILL., November 1, 1890.

*Hon. John R. Wheeler, Chairman Railroad and Warehouse Commission, Springfield, Illinois:*

DEAR SIR: I have the honor to submit the following report of the operations of this department during the year ending the 31st day of October, 1890, and to invite your attention to the information furnished by the tabular statements herewith presented for the consideration of your honorable board.

Exhibit "D" shows a comparative statement of the amount of grain received into store by the public warehouses of Chicago, from 1882 to 1890, both inclusive, and while it does not show a gain over the remarkably prosperous year of 1889, it establishes the fact of the continued popularity of our system of inspection and warehousing of grain, by showing an excess of receipts into store over the average, for the past eight years, of 16,898,472 bushels, and an excess of shipment out of store over average covering same period of 16,374,971 bushels.

As it frequently occurs that the managers of warehouses find themselves short on certain kinds and grades of grain, necessitating the purchase of a sufficient amount, which, with stocks in store, will satisfy outstanding receipts, and in other cases finding themselves in possession of an accumulation in excess of such an amount as to satisfy the receipts for certain grades, necessitating application to your honorable board through this office for permission to issue and have registered warehouse receipts for such overage, I desire to renew the recommendations in my reports for the years 1886-87-88-89 on the subject of an annual weighing over of all grain in store in public warehouses of class "A" as often as once during each year, at such times as when stocks in store are so low as to not seriously inconvenience the business of such warehouses.

On the 21st day of March last, your honorable board, through Secretary Paddock, instructed me to notify the proprietors of public warehouses, that in your opinion they should file separate bonds in the sum of \$10,000 for each warehouse operated by them, and that if they had not heretofore complied with this provision of the law they were requested to do so at once.

Following your instructions, on the 26th day of March I completed the notification to all proprietors controlling more than one elevator, and was immediately informed that the request was in the line of a greater security to the public and would be most cheerfully complied with.

I am pleased to say copies of the new bonds, certified by Henry Best, Clerk of the Circuit Court of Cook county, have been filed in this office by all firms affected by your order, in conformity with law.



## CHANGE OF FIRMS.

The Munger Wheeler Elevator Co. changed to "City of Chicago Grain Elevators, Limited," under the management of P. B. Weare. The elevators controlled by this firm are Union, City, Fulton, Air Line, Galena, Iowa and St. Paul, with a total storage capacity of 5,590,000 bushels.

The Rock Island A. & B. Elevators, heretofore managed by Flint, Odell & Co., are now controlled, the "A" house by Chas. Counselman & Co., and the "B" house by C. B. Congdon & Co.

The National and St. Louis Elevators, operated by D. L. Seymour & Co., changed to National Elevator and Dock Co.

## STORAGE CAPACITY.

Total storage capacity of Chicago elevators October 1, 1889, was 28,970,000 bushels. During the year covered by this report that amount has been decreased 630,000 bushels by the withdrawal of the Northwestern and Sibley "B" Elevators, which are now operated as cleaning houses, and not licensed as public warehouses.

The total storage capacity at this time of the twenty-five public warehouses being 28,340,000 bushels.

## RECEIPTS.

Total amount of all kinds of grain received into store during the year, in warehouses of class "A," as presented in Exhibit "A"-7, was 83,521,433 bushels, from 125,502 cars, 439 canal boats, and 6 vessels.

The receipts for 1,372 cars, six canal boats and one vessel included in above totals were not presented for registration.

A comparison of receipts into store during the year with the preceding year, 1889, shows a decrease of 23,032 cars and twenty-six canal boats, aggregating a total decrease of 15,114,429 bushels.

## SHIPMENTS.

Total amount of all kinds of grain shipped out of store during the year was 85,895,930 bushels. A decrease of 15,810,300 from the total of shipments during the year 1889.

## INSPECTION.

Total number of cars graded by the Inspection Department during the year was 272,956, an increase of 23,073 cars over number inspected during the year 1889; 125,502 being the total number received into store, the remaining 147,454 cars was either sold on track or shipped to seaboard without transfer to elevators.

## CAR AVERAGES.

The following will show the average number of bushels of each kind of grain received from cars during the year:

|             |       |               |
|-------------|-------|---------------|
| Wheat.....  | 603   | bushels ..... |
| Corn.....   | 619   | " .....       |
| Oats.....   | 1,016 | " .....       |
| Rye.....    | 604   | " .....       |
| Barley..... | 647   | " .....       |

## APPEALS.

Your Committee of Appeals to which was referred 967 cases during the year sustained the inspection of the department in 451 cases, and raised the grade from that of the original inspection in 516 cases.

A decrease from total number of appeals taken during the year 1889, of 864 cases. This showing is proof of the continued and increased efficiency of the inspectors.

## AMENDED RULES.

Upon my recommendation, your honorable board on the 17th day of January last, adopted the following, which has been in force since that date:

Amend rules for the government of the Committee of Appeals established by the Board of Railroad and Warehouse Commissioners, and in force from and after November 1, 1889, by inserting therein the following after Rule III.:

## RULE IV.

1. When an appeal has been taken upon any car of grain, and the Committee of Appeals has been unable, after proper search, to find said car upon the day such appeal is taken, it shall be the duty of said committee to make diligent search for such car in the proper yards on the first business day thereafter, and if not then found, the appellant may withdraw the appeal and the deposit made thereon, but not before.

2. When it shall occur that the appellant gives a wrong number or other erroneous information to the committee in making an appeal, and the committee acting upon such information shall make search for cars so appealed upon, then the fees so deposited shall be forfeited exactly as if an adverse decision has been reached.

Change Rules IV and V to Rules V and VI, respectively.

## GRAIN IN STORE.

The total amount of each kind of grain in store at this time is:

|             |           |               |
|-------------|-----------|---------------|
| Wheat.....  | 4,847,364 | bushels ..... |
| Corn.....   | 1,568,191 | " .....       |
| Oats.....   | 778,165   | " .....       |
| Rye.....    | 318,726   | " .....       |
| Barley..... | 598,521   | " .....       |

Our relations with the managers of warehouses and patrons of this office continue to be pleasant and satisfactory. I ask for the employés who are competent and faithful, a continuance of your official favor.

Respectfully submitted,

J. W. BURST, *Warehouse Registrar.*

## EXHIBIT A-1.

## Receipts into Store—Winter Wheat by Rail.

| Warehouses.             | 2 White. | 3 White. | 4 White. | 2 Long Red. | 1 Turk-<br>ish Red. | 2 Turk-<br>ish Red. | 3 Turk-<br>ish Red. | 1 Red. | 2 Red.    | 3 Red.    | 4 Red.  | N. G.  | Total.    |
|-------------------------|----------|----------|----------|-------------|---------------------|---------------------|---------------------|--------|-----------|-----------|---------|--------|-----------|
| Central B.              | 542      |          |          |             |                     | 67,466              | 23,974              |        | 79,639    | 62,212    | 2,984   | 1,170  | 237,987   |
| C. B. and Q. C. and D.  |          |          |          |             |                     | 70,818              | 28,659              |        | 124,949   | 44,215    | 5,215   |        | 273,856   |
| City Union and St. Paul |          | 3,669    |          |             |                     | 46,314              | 5,935               | 412    | 58,265    | 48,254    | 12,080  |        | 174,929   |
| Iowa                    | 1,542    | 425      |          | 380         |                     | 44,166              | 5,701               |        | 41,018    | 8,130     | 2,592   | 675    | 104,679   |
| Indiana                 |          | 404      | 1,060    |             |                     | 27,071              | 24,983              |        | 190,604   | 317,298   | 81,709  | 1,643  | 644,772   |
| Ark.                    |          | 16,298   |          |             |                     |                     |                     |        | 272,334   | 216,501   | 71,345  |        | 576,478   |
| Armour.                 |          |          |          |             |                     | 285,910             | 61,632              |        | 185,796   | 18,551    | 6,457   | 377    | 570,140   |
| Santa Fe.               | 1,478    |          |          |             |                     | 439,516             | 137,784             |        | 161,085   | 238,365   | 28,553  |        | 1,007,080 |
| Rock Island A.          |          | 589      |          |             |                     | 68,213              | 7,968               | 727    | 215,540   | 27,459    | 6,873   | 9,189  | 936,488   |
| Rock Island B.          |          |          |          |             |                     | 2,108               |                     |        | 10,024    | 2,969     |         |        | 15,101    |
| National and St. Louis  | 1,019    | 2,459    |          |             |                     | 145,510             | 41,594              |        | 126,620   | 187,706   | 13,918  |        | 518,826   |
| St. Louis               |          | 795      |          |             |                     |                     |                     |        | 5,501     | 23,872    | 38,824  |        | 72,348    |
| Illinois River.         | 3,716    | 15,190   | 5,140    | 124         |                     | 41,196              | 7,932               |        | 4,823     | 142,309   | 36,276  | 3,142  | 260,329   |
| Pacific B.              |          |          |          |             |                     |                     |                     |        | 27,589    | 2,154     | 1,489   |        | 31,232    |
| Totals                  | 8,297    | 40,915   | 6,200    | 504         |                     | 671                 | 346,222             | 1,139  | 1,503,817 | 1,839,985 | 308,315 | 19,898 | 4,824,246 |

See Exhibit A-3.

*Winter Wheat by Canal.*

| Warehouses.     | 2 Turk-<br>ish Red. | 3 Turk-<br>ish Red. | 3 Red. | 4 Red. | N. G. | Total. |
|-----------------|---------------------|---------------------|--------|--------|-------|--------|
| City .....      |                     |                     |        | 2,870  |       | 2,870  |
| Indiana .....   |                     | 3,940               | 17,213 | 2,087  |       | 23,240 |
| Alton .....     |                     |                     | 6,705  |        |       | 6,705  |
| St. Louis ..... | 4,348               | 2,776               | 37,665 |        |       | 44,789 |
| Neely .....     |                     |                     |        |        | 3,300 | 3,300  |
| Totals.....     | 4,348               | 6,716               | 61,583 | 4,957  | 3,300 | 80,904 |

## Shipments—Winter Wheat.

| Warehouses.                      | 2 White. | 3 White. | 4 White. | 2 Long Red. | 1 Turk-<br>ish Red. | 2 Turk-<br>ish Red. | 3 Turk-<br>ish Red. | 1 Red. | 2 Red.  | 3 Red.    | 4 Red.  | N. G.  | Total.    |
|----------------------------------|----------|----------|----------|-------------|---------------------|---------------------|---------------------|--------|---------|-----------|---------|--------|-----------|
| Central B. . . . .               | 756      |          |          |             |                     | 53,560              | 21,522              |        | 49,009  | 66,658    | 4,932   | 1,170  | 197,251   |
| C. B. & Q., C. and D. . . . .    |          |          |          |             |                     | 43,340              | 27,151              |        | 83,234  | 74,735    | 8,341   |        | 237,617   |
| Union, St. Paul and City . . . . | 1,542    | 3,669    |          |             |                     |                     | 1,327               |        | 27,139  | 55,960    | 16,533  |        | 104,834   |
| Galena and Iowa. . . . .         |          | 425      |          |             |                     | 6,943               | 5,761               |        |         | 8,525     | 2,392   | 675    | 26,463    |
| Indiana . . . . .                |          | 404      | 6,923    |             |                     | 42,597              | 24,490              |        | 91,274  | 433,417   | 111,423 | 2,357  | 712,865   |
| Alton. . . . .                   |          | 16,298   |          |             |                     |                     |                     |        | 91,760  | 219,813   | 69,246  |        | 397,117   |
| Santa Fe. . . . .                |          | 1,126    |          |             | 671                 | 381,708             | 134,055             |        | 53,637  | 372,237   | 28,738  |        | 975,172   |
| Armour. . . . .                  | 1,478    |          |          |             |                     | 148,399             | 53,769              |        | 53,678  | 70,631    | 6,457   | 377    | 336,789   |
| Rock Island A. . . . .           | 533      | 569      |          |             |                     | 76,711              | 7,968               | 727    | 34,039  | 41,504    | 15,649  | 11,622 | 183,352   |
| Rock Island B. . . . .           |          |          |          |             |                     | 2,108               |                     |        | 12,669  | 2,969     |         |        | 17,746    |
| National and St. Louis. . . . .  |          | 2,459    |          |             |                     | 126,749             | 32,159              |        | 90,755  | 220,723   | 7,818   |        | 474,693   |
| Pacific B. . . . .               |          |          |          |             |                     | 382                 |                     |        | 2,864   | 32,062    | 4,420   |        | 39,728    |
| Neely. . . . .                   |          | 3,425    |          |             |                     |                     |                     |        | 52,690  | 37,251    | 33,161  | 8,550  | 141,531   |
| Illinois River. . . . .          | 3,716    | 15,645   | 3,813    | 124         |                     |                     | 7,336               |        | 4,823   | 185,535   | 25,738  | 1,692  | 248,298   |
| Totals. . . . .                  | 8,025    | 44,020   | 10,736   | 124         | 671                 | 873,527             | 315,738             | 727    | 649,371 | 1,822,110 | 341,084 | 26,423 | 4,093,156 |



## EXHIBIT A—2.

*Receipts into Store—Spring Wheat by Rail.*

| Warehouses.                    | 2 Hard..... | 2.....    | 3.....  | 4.....  | N. G..... | 3 White..... | 3 Mixed..... | 2 White..... | 2 Mixed..... | Total..... |
|--------------------------------|-------------|-----------|---------|---------|-----------|--------------|--------------|--------------|--------------|------------|
| Central B.....                 |             | 33,782    | 6,159   | 152     |           |              |              |              |              | 40,093     |
| C., B. & Q., C and D.....      |             | 92,690    | 47,637  | 61,178  | 1,383     | 52,158       | 1,320        |              |              | 256,366    |
| City and St. Paul.....         |             | 361,766   | 54,084  | 9,135   |           | 5,524        | 5,422        |              |              | 435,931    |
| Air Line, Galena and Iowa..... |             | 433,434   | 23,849  | 4,368   | 575       | 1,549        |              |              |              | 463,775    |
| Indiana.....                   |             | 63,980    | 3,607   | 6,433   | 2,002     | 1,045        | 1,594        |              |              | 78,661     |
| Alton.....                     |             | 1,165,116 | 105,823 | 24,990  | 7,277     | 8,059        |              |              |              | 1,311,265  |
| Armour.....                    |             | 1,312,919 | 65,886  | 15,493  | 568       | 16,555       | 473          | 1,737        |              | 1,443,931  |
| Santa Fe.....                  | 399         | 324,362   | 34,997  |         |           |              |              |              | 548          | 360,306    |
| Rock Island A.....             | 922         | 175,839   | 12,808  | 1,689   |           | 2,088        |              | 567          |              | 193,913    |
| Rock Island B.....             |             | 4,321     | 394     | 509     |           | 1,082        |              |              |              | 6,306      |
| Nation'l & St. Louis.....      |             | 77,395    |         |         |           | 1,172        |              |              |              | 78,567     |
| Neely.....                     |             | 33,117    | 12,314  | 8,155   | 548       | 707          | 1,011        |              | 722          | 56,574     |
| Pacific B.....                 |             | 594,009   | 15,301  |         |           |              |              |              |              | 609,310    |
| Illinois River.....            |             | 38,821    | 110,234 | 45,144  | 3,714     | 15,568       | 5,793        | 1,945        |              | 220,619    |
| Totals.....                    | 1,321       | 4,741,551 | 493,093 | 177,246 | 16,067    | 105,807      | 15,613       | 3,619        | 1,270        | 5,555,617  |

See Exhibit A—8.

*Spring Wheat by Canal.*

| Warehouses.    | 2       | 3      | Total.  |
|----------------|---------|--------|---------|
| Union.....     | 41,350  |        | 41,350  |
| Alton.....     | 40,929  | 33,920 | 74,849  |
| Armour.....    | 20,729  |        | 20,729  |
| St. Louis..... | 9,732   |        | 9,732   |
| Totals.....    | 112,740 | 33,920 | 146,660 |

*Shipments—Spring Wheat.*

| Warehouses.                 | 2 Hard..... | 2.....    | 3.....  | 4.....  | N. G..... | 2 White..... | 3 White..... | 3 Mixed..... | Total.    |
|-----------------------------|-------------|-----------|---------|---------|-----------|--------------|--------------|--------------|-----------|
| Central B.....              |             | 16,919    | 6,159   | 1,661   |           |              |              |              | 24,739    |
| C., B. & Q., B. C. D.....   |             | 96,049    | 56,941  | 67,668  | 1,383     |              | 69,288       | 602          | 291,931   |
| Union St. Paul & City.....  |             | 243,591   | 56,994  | 14,455  | 446       |              | 5,524        | 5,422        | 326,432   |
| Galena & Iowa.....          | 532         | 124,405   | 21,787  | 6,200   | 575       |              | 1,549        |              | 155,048   |
| Indiana.....                |             |           | 3,358   | 11,693  | 4,014     |              | 3,284        | 1,594        | 23,943    |
| Alton.....                  | 609         | 946,706   | 122,064 | 27,745  |           |              | 8,059        |              | 1,105,183 |
| Santa Fe.....               | 399         | 308,752   | 34,997  |         |           |              |              |              | 344,148   |
| Armour.....                 | 495         | 1,193,653 | 71,150  | 24,904  | 568       | 508          | 53,352       | 473          | 1,345,103 |
| Rock Island A.....          | 422         | 43,145    | 19,017  | 5,470   |           | 567          | 2,737        |              | 71,358    |
| Rock Island B.....          |             | 4,321     | 394     | 509     |           |              | 1,082        |              | 6,306     |
| National and St. Louis..... |             | 25,612    |         |         |           |              | 1,172        |              | 26,784    |
| Pacific.....                |             | 64,498    | 67,163  | 661     |           |              | 490          |              | 132,812   |
| Neely.....                  |             | 15,718    | 11,440  | 5,037   | 548       |              | 267          | 1,011        | 34,021    |
| Illinois River.....         | 621         | 46,281    | 129,090 | 36,653  | 3,211     | 679          | 16,350       | 5,840        | 238,725   |
| Totals.....                 | 3,078       | 3,129,650 | 600,554 | 202,656 | 10,745    | 1,754        | 163,154      | 14,942       | 4,126,533 |

EXHIBIT A.—3.  
*Receipts Into Store—Corn by Rail.*

| Warehouses.                         | 1 Yellow. | 2 Yellow. | 3 Yellow. | 2 White.  | 3 White. | 2          | 3          | 4       | N. G. | Total.     |
|-------------------------------------|-----------|-----------|-----------|-----------|----------|------------|------------|---------|-------|------------|
| Central B.....                      | .....     | 1,854,790 | 1,048,882 | 370,870   | 196,298  | 1,854,545  | 851,122    | 165,142 | 673   | 6,342,322  |
| C. B. & Q. A. B. C. D. & Annex..... | .....     | 1,780,815 | 1,236,739 | 354,090   | 151,548  | 4,577,185  | 3,828,300  | 116,950 | ..... | 12,025,627 |
| City & Union & St. Paul.....        | .....     | 564,121   | 203,721   | 112,343   | 55,136   | 3,012,060  | 1,361,809  | 46,362  | 1,799 | 5,357,444  |
| Iowa & Galena.....                  | .....     | 877,819   | 338,571   | 32,708    | 27,414   | 1,971,325  | 880,523    | 12,169  | ..... | 4,140,529  |
| Indiana.....                        | .....     | 743,851   | 678,675   | 253,233   | 159,059  | 1,570,935  | 914,883    | 247,481 | ..... | 4,574,117  |
| Alton.....                          | .....     | 21,508    | 6,801     | 10,155    | 12,755   | 244,858    | 6,852      | .....   | ..... | 302,929    |
| Armour.....                         | .....     | 934,787   | 248,576   | 132,350   | 33,408   | 2,841,878  | 1,065,126  | 23,022  | ..... | 5,279,207  |
| Santa Fe.....                       | .....     | 448,384   | 347,852   | 101,794   | 54,757   | 2,428,990  | 1,386,677  | 7,285   | ..... | 4,770,739  |
| Rock Island—A.....                  | .....     | 960,029   | 413,436   | 97,785    | 45,448   | 4,343,043  | 2,287,756  | 21,436  | ..... | 8,168,933  |
| Rock Island—B.....                  | 500       | 214,469   | 72,223    | 64,390    | 17,355   | 1,488,978  | 443,102    | .....   | ..... | 2,301,017  |
| National & St. Louis.....           | .....     | 242,319   | 228,478   | 98,141    | 46,152   | 1,494,597  | 481,380    | 7,063   | ..... | 1,598,130  |
| Pacific B.....                      | .....     | 24,213    | 39,540    | 1,944     | .....    | 117,173    | 81,616     | .....   | ..... | 1,203,586  |
| Neely.....                          | .....     | 12,457    | .....     | 1,419     | .....    | 337,071    | 46,169     | 38,185  | 2,981 | 438,823    |
| Illinois River.....                 | .....     | .....     | .....     | 1,429     | .....    | .....      | .....      | .....   | ..... | 1,429      |
| Totals.....                         | 500       | 8,674,562 | 4,864,038 | 1,637,751 | 779,390  | 25,282,638 | 13,635,405 | 685,095 | 5,453 | 55,564,832 |

See Exhibit A—8.

*Corn—By Canal.*

| Warehouses..         | 2<br>Yellow... | 3<br>Yellow.. | 2<br>White... | 2       | 3       | 4      | N. G..... | Total.    |
|----------------------|----------------|---------------|---------------|---------|---------|--------|-----------|-----------|
| City and Union ..... | 27,574         | 22,563        | 443,976       | 160,065 | .....   | .....  | 2,070     | 656,248   |
| Indiana .....        | 19,855         | 11,196        | 5,235         | 185,306 | 235,568 | 13,963 | .....     | 471,123   |
| Armour .....         | .....          | 7,013         | .....         | .....   | 3,942   | .....  | .....     | 10,955    |
| St. Louis .....      | 9,864          | 48,690        | 4,183         | 193,862 | 131,702 | 344    | 866       | 389,511   |
| Neely .....          | .....          | .....         | .....         | .....   | .....   | .....  | 5,000     | 5,000     |
| Totals .....         | 57,293         | 89,462        | 453,394       | 539,233 | 371,212 | 14,307 | 7,936     | 1,532,837 |

SHIPMENTS—*Corn.*

| Warehouses.                  | <sup>1</sup><br>Yellow. | <sup>2</sup><br>Yellow. | <sup>3</sup><br>Yellow. | <sup>2</sup><br>White. | <sup>3</sup><br>White. | 2          | 3          | 4       | N. G.  | Total.     |
|------------------------------|-------------------------|-------------------------|-------------------------|------------------------|------------------------|------------|------------|---------|--------|------------|
| Central A and B.....         |                         | 1,907,194               | 1,038,400               | 396,730                | 194,337                | 1,921,544  | 816,180    | 164,579 |        | 6,433,646  |
| C., B. & Q., A, B, C, D..... |                         | 1,799,898               | 1,222,162               | 372,653                | 127,519                | 4,619,325  | 3,812,950  | 117,494 | 673    | 12,472,001 |
| Union, St. Paul, City.....   |                         | 589,020                 | 256,287                 | 110,389                | 50,872                 | 3,411,343  | 1,518,702  | 43,280  |        | 3,933,762  |
| Galena & Iowa.....           |                         | 864,308                 | 335,183                 | 30,338                 | 23,632                 | 1,842,129  | 875,402    | 3,938   | 3,869  | 3,974,330  |
| Indiana & Wabash.....        |                         | 761,369                 | 678,067                 | 251,077                | 154,892                | 1,734,211  | 1,117,472  | 257,891 |        | 4,955,069  |
| Alfon.....                   |                         | 23,525                  | 6,801                   | 10,155                 | 12,718                 | 288,235    | 5,881      | 965     |        | 4,348,308  |
| Santa Fe.....                |                         | 453,276                 | 342,145                 | 96,487                 | 53,992                 | 2,513,354  | 1,372,342  | 6,737   |        | 4,838,393  |
| Armour.....                  |                         | 941,985                 | 256,688                 | 125,473                | 41,727                 | 3,151,745  | 1,080,933  | 23,022  |        | 5,621,573  |
| Rock Island A.....           |                         | 931,950                 | 414,943                 | 95,455                 | 43,129                 | 4,237,312  | 2,254,560  | 21,451  |        | 7,998,803  |
| Rock Island B.....           | 500                     | 282,272                 | 72,223                  | 66,425                 | 18,131                 | 1,576,378  | 413,102    | 1,028   |        | 2,400,069  |
| National and St. Louis.....  |                         | 263,091                 | 272,854                 | 101,750                | 46,150                 | 690,445    | 601,590    | 7,407   | 866    | 1,984,153  |
| Pacific.....                 |                         | 17,104                  | 37,451                  |                        |                        | 111,561    | 82,866     |         |        | 249,433    |
| Neely.....                   |                         | 55,288                  |                         |                        |                        | 353,651    | 45,533     |         | 7,981  | 500,700    |
| Illinois River.....          |                         |                         |                         | 2,099                  | 608                    | 604        |            |         |        | 3,311      |
| Totals.....                  | 500                     | 8,834,280               | 4,903,213               | 1,659,482              | 707,127                | 26,453,915 | 14,027,513 | 684,142 | 13,389 | 57,393,561 |

## EXHIBIT A-4.

RECEIPTS INTO STORE—*Oats by Rail.*

| Warehouses.                   | <sup>2</sup><br>White. | <sup>3</sup><br>White. | 2         | 3      | N. G.  | Total.     |
|-------------------------------|------------------------|------------------------|-----------|--------|--------|------------|
| Central B.....                | 401,565                | 355,313                | 1,002,006 | 9,028  | 2,166  | 1,770,078  |
| C., B. & Q., C and D.....     | 525,423                | 261,168                | 516,489   | 10,057 |        | 1,313,137  |
| City, Union and St. Paul..... | 525,545                | 251,033                | 201,624   | 4,502  | 1,364  | 984,068    |
| Iowa and Galena.....          | 907,646                | 673,963                | 439,081   | 4,378  |        | 2,025,068  |
| Indiana.....                  | 43,384                 | 95,254                 | 279,113   | 8,893  |        | 426,644    |
| Alton.....                    | 39,659                 | 178,137                | 31,581    | 4,169  | 770    | 254,316    |
| Armour.....                   | 1,444,014              | 1,036,008              | 361,218   | 13,405 | 888    | 2,855,533  |
| Santa Fe.....                 | 148,299                | 34,971                 | 145,008   | 2,050  |        | 330,328    |
| Rock Island A.....            | 1,137,305              | 1,655,861              | 173,493   | 5,121  |        | 2,971,780  |
| Rock Island B.....            | 7,503                  | 19,515                 |           |        |        | 27,018     |
| National and St. Louis.....   | 70,416                 | 164,129                | 143,835   | 981    |        | 379,361    |
| Pacific B.....                | 166,557                | 7,869                  | 185,525   |        |        | 359,951    |
| Neely.....                    | 37,186                 | 32,518                 | 275,058   | 2,969  | 4,924  | 352,655    |
| Totals.....                   | 5,454,502              | 4,765,739              | 3,754,031 | 65,553 | 10,112 | 14,049,987 |

*Oats by Canal.*

| Warehouses.         | <sup>2</sup><br>White. | <sup>3</sup><br>White. | 2       | 3      | N. G. | Total.  |
|---------------------|------------------------|------------------------|---------|--------|-------|---------|
| City and Union..... | 61,964                 | 112,064                | 102,843 | 11,626 |       | 288,497 |
| Indiana.....        |                        | 27,621                 |         |        |       | 27,621  |
| Alton.....          | 14,990                 | 34,228                 | 7,291   |        |       | 56,509  |
| Armour.....         |                        | 44,285                 |         |        | 3,018 | 47,303  |
| St. Louis.....      | 79,811                 | 92,739                 | 112,421 | 1,672  |       | 286,643 |
| Neely.....          | 7,573                  |                        |         |        |       | 7,573   |
| Totals.....         | 164,338                | 310,937                | 222,555 | 13,298 | 3,018 | 714,146 |

SHIPMENTS—*Oats.*

| WAREHOUSES.                 | 2 White.  | 3 White.  | 2         | 3       | N. G. | Total.     |
|-----------------------------|-----------|-----------|-----------|---------|-------|------------|
| Central B.....              | 433,080   | 391,719   | 1,098,413 | 13,872  | 2,166 | 1,879,250  |
| C., B. & Q., C. & D.....    | 541,154   | 412,772   | 599,435   | 24,273  |       | 1,577,634  |
| Union, St. Paul & City..... | 613,129   | 397,646   | 252,090   | 24,067  | 495   | 1,287,427  |
| Galena & Iowa.....          | 909,753   | 390,888   | 401,738   | 4,378   |       | 2,036,757  |
| Indiana & Wabash.....       | 208,568   | 306,415   | 304,166   | 51,486  |       | 870,635    |
| Alton.....                  | 82,043    | 215,775   | 369,009   | 21,054  | 770   | 688,651    |
| Santa Fe.....               | 203,375   | 109,485   | 148,505   | 2,050   |       | 463,415    |
| Armour.....                 | 1,584,513 | 1,156,916 | 440,099   | 13,405  | 3,906 | 3,168,839  |
| Rock Island A.....          | 1,117,405 | 1,657,273 | 147,299   | 5,121   |       | 2,927,088  |
| Rock Island B.....          | 7,503     | 20,187    | 1,777     |         |       | 29,467     |
| National & St. Louis.....   | 145,614   | 223,083   | 242,794   | 2,653   |       | 614,144    |
| Pacific.....                | 450,969   | 13,591    | 326,575   | 13,544  |       | 804,679    |
| Neely.....                  | 71,628    | 35,499    | 196,703   | 7,365   | 633   | 311,828    |
| Sibly.....                  | 114,394   | 8,892     | 87,958    |         |       | 211,244    |
| Totals.....                 | 6,483,128 | 5,670,141 | 4,526,561 | 183,268 | 7,970 | 16,871,068 |



## EXHIBIT A—5.

RECEIPTS INTO STORE—*Rye by Rail.*

| WAREHOUSES.                  | 1   | 2         | 3       | N. G. | Total.    |
|------------------------------|-----|-----------|---------|-------|-----------|
| Central B.....               |     | 89,929    | 4,497   | ..... | 94,426    |
| C., B. & Q. D.....           |     | 227,528   | 38,662  | ..... | 266,190   |
| City & Union & St. Paul..... |     | 108,262   | 4,657   | ..... | 112,919   |
| Iowa.....                    |     | 102,516   | .....   | ..... | 102,516   |
| Indiana.....                 |     | 28,122    | 15,299  | ..... | 43,421    |
| Alton.....                   |     | 12,018    | 29,282  | ..... | 191,300   |
| Armour.....                  | 532 | 167,534   | 1,130   | ..... | 169,196   |
| Santa Fe.....                |     | 38,183    | .....   | ..... | 38,183    |
| Rock Island A.....           |     | 104,856   | 9,112   | 239   | 114,207   |
| Rock Island B.....           |     | 12,989    | 6,673   | ..... | 19,662    |
| National & St. Louis.....    |     | 21,485    | 965     | ..... | 22,450    |
| Pacific B.....               |     | 154,628   | 8,954   | ..... | 163,582   |
| Neely.....                   |     | 72,814    | 101,439 | 3,490 | 177,743   |
| Totals .....                 | 532 | 1,290,864 | 220,670 | 3,729 | 1,515,795 |

*Rye by Canal.*

| WAREHOUSES.    | 2      |
|----------------|--------|
| Union.....     | 12,368 |
| Armour.....    | 2,095  |
| St. Louis..... | 5,035  |
| Total .....    | 19,498 |

SHIPMENTS—*Rye.*

| WAREHOUSES.                          | 1   | 2         | 3       | N. G. | Total.    |
|--------------------------------------|-----|-----------|---------|-------|-----------|
| Central B.....                       |     | 84,178    | 4,705   | ..... | 88,883    |
| C., B. & Q., C. and D.....           |     | 224,827   | 47,648  | ..... | 272,475   |
| Union, St. Paul, N.-W. and City..... |     | 138,039   | 4,657   | ..... | 142,696   |
| Iowa.....                            |     | 72,249    | 2,276   | ..... | 74,525    |
| Indiana.....                         |     | 41,500    | 22,291  | ..... | 63,791    |
| Alton.....                           |     | 165,423   | 20,886  | ..... | 186,309   |
| Santa Fe.....                        |     | 65,140    | .....   | ..... | 65,140    |
| Armour.....                          | 532 | 348,883   | 8,158   | ..... | 357,573   |
| Rock Island A.....                   |     | 93,908    | 10,455  | 239   | 104,602   |
| Rock Island B.....                   |     | 14,678    | 6,673   | ..... | 21,351    |
| National & St. Louis.....            |     | 19,073    | 965     | ..... | 20,038    |
| Pacific B.....                       |     | 117,214   | 33,267  | ..... | 150,481   |
| Neely.....                           |     | 20,686    | 119,534 | 1,500 | 141,720   |
| Totals .....                         | 532 | 1,405,798 | 281,515 | 1,739 | 1,689,584 |

## EXHIBIT A—6.

RECEIPTS INTO STORE—*Barley by Rail.*

| WAREHOUSES.                 | 2      | 3         | 4       | 5      | N. G. | Total.    |
|-----------------------------|--------|-----------|---------|--------|-------|-----------|
| Central B.....              |        | 109,617   | 48,192  | 11,992 |       | 169,801   |
| C. B. & Q., D.....          | 3,769  | 98,230    | 13,206  | 2,584  |       | 117,789   |
| City, Union & St. Paul..... |        | 658,747   | 126,395 | 7,129  | 2,918 | 795,189   |
| Iowa & Galena.....          | 3,216  | 618,784   | 102,255 | 15,506 |       | 739,761   |
| Indiana.....                |        |           |         | 295    |       | 295       |
| Armour.....                 | 1,098  | 68,135    | 35,993  |        |       | 105,226   |
| Santa Fe.....               |        |           |         |        |       |           |
| Rock Island A.....          | 10,648 | 35,033    | 912     |        |       | 46,593    |
| Rock Island B.....          | 2,238  | 2,562     | 1,946   | 1,301  |       | 8,047     |
| Pacific B.....              | 25,323 | 1,436     |         |        |       | 26,764    |
| Neely.....                  |        |           |         |        | 1,541 | 1,541     |
| Totals.....                 | 46,297 | 1,592,544 | 328,899 | 38,807 | 4,459 | 2,011,006 |

SHIPMENTS—*Barley.*

| WAREHOUSES.            | 2      | 3         | 4       | 5      | N. G. | 3<br>Bay<br>Brew-<br>ing. | Total.    |
|------------------------|--------|-----------|---------|--------|-------|---------------------------|-----------|
| Central B.....         |        | 67,606    | 48,736  | 14,049 |       |                           | 130,391   |
| C. B. & Q., D.....     | 2,460  | 26,118    | 8,471   | 2,584  |       |                           | 39,633    |
| St. Paul and City..... | 1,216  | 539,122   | 117,219 | 7,937  | 3,010 | 600                       | 669,110   |
| Galena and Iowa.....   | 16,603 | 561,169   | 128,252 | 16,722 |       |                           | 722,746   |
| Indiana.....           |        |           |         | 295    |       |                           | 295       |
| Pacific B.....         |        | 1,436     |         |        |       |                           | 22,843    |
| Santa Fe.....          | 21,407 | 1,458     | 2,518   |        |       |                           | 3,976     |
| Neely.....             |        |           |         |        | 1,541 |                           | 1,541     |
| Armour.....            | 4,236  | 70,369    | 32,403  |        |       |                           | 107,008   |
| Rock Island B.....     | 2,238  | 7,628     | 8,423   | 1,906  |       |                           | 20,195    |
| Rock Island A.....     | 1,435  | 1,943     | 912     |        |       |                           | 4,290     |
| Totals.....            | 49,595 | 1,276,849 | 346,934 | 43,493 | 4,557 | 600                       | 1,722,028 |

## EXHIBIT A—7.

## GRAND TOTALS.

| Warehouses.                       | Receipts by<br>rail. | Shipments. |
|-----------------------------------|----------------------|------------|
| Central B.....                    | 8,654,707            | 8,754,160  |
| C. B. & Q., A. C. D. & Annex..... | 14,252,965           | 14,491,291 |
| City, Union & St. Paul.....       | 7,860,480            | 8,484,261  |
| Air Line, Galena & Iowa.....      | 7,576,328            | 6,989,889  |
| Indiana.....                      | 5,707,910            | 6,626,588  |
| Alton.....                        | 2,636,288            | 2,725,568  |
| Armour.....                       | 10,423,231           | 10,936,885 |
| Santa Fe.....                     | 6,506,636            | 6,690,244  |
| Rock Island A.....                | 11,831,914           | 11,289,503 |
| Rock Island B.....                | 2,377,151            | 2,555,134  |
| National & St. Louis.....         | 2,597,334            | 3,119,812  |
| Pacific B.....                    | 1,454,425            | 1,399,976  |
| Neely.....                        | 1,099,684            | 1,131,041  |
| Illinois River.....               | 482,377              | 490,334    |
| Sibley.....                       |                      | 211,244    |
|                                   | 83,521,433           | 85,895,930 |

## Exhibit A—7.—Continued.

## RECEIPTS—By Canal.

| Warehouses.       | Bushels.  |
|-------------------|-----------|
| City & Union..... | 1,001,333 |
| Indiana.....      | 521,984   |
| Alton.....        | 138,063   |
| St. Louis.....    | 735,710   |
| Neely.....        | 15,873    |
| Armour.....       | 81,082    |
| Total .....       | 2,494,045 |

## EXHIBIT A—8.

*Showing the amount of Grain transferred from one Warehouse to another.*

| From.                       | To.                 | 2 Red<br>winter<br>wheat. | 2<br>Spring<br>wheat. | 2<br>Corn. | 2<br>Rye. | 3<br>Rye. |
|-----------------------------|---------------------|---------------------------|-----------------------|------------|-----------|-----------|
| Alton.....                  | National.....       | 3,964                     |                       |            |           |           |
| Neely.....                  | Indiana.....        | 8,296                     |                       |            |           |           |
| Santa Fe.....               | Illinois River..... |                           | 14,923                |            |           |           |
| Santa Fe.....               | Alton.....          |                           | 105,812               |            |           |           |
| Santa Fe.....               | National.....       |                           | 20,961                |            |           |           |
| Alton.....                  | St. Louis.....      |                           | 4,985                 |            |           |           |
| Alton.....                  | National.....       |                           | 40,947                |            |           |           |
| Alton.....                  | Neely.....          |                           | 4,871                 |            |           |           |
| Wabash.....                 | Indiana.....        |                           |                       | 4,990      |           |           |
| Chi. Burlington & Quincy A. | Neely.....          |                           |                       | 42,343     |           |           |
| St. Paul.....               |                     |                           |                       | 67,067     |           |           |
| City.....                   |                     |                           |                       | 14,449     |           |           |
| Rock Island A.....          |                     |                           |                       | 15,539     |           |           |
| Chi. Burlington & Quincy D. |                     |                           |                       |            | 10,498    |           |
| Armour.....                 |                     |                           |                       |            | 15,249    |           |
| Pacific B.....              |                     |                           |                       |            | 5,000     |           |
| Iowa.....                   |                     |                           |                       |            |           | 2,998     |
| Chi. Burlington & Quincy D. |                     |                           |                       |            |           | 5,087     |
| Rock Island A.....          |                     |                           |                       |            |           | 6,773     |
| Totals .....                |                     | 12,260                    | 192,499               | 144,388    | 30,747    | 14,853    |

NOTE—The amount of grain, as shown in this exhibit, is included in the receipts and shipments.

## EXHIBIT A—9.

*Showing the Number of Cars of each kind of Grain Received into the several Public Warehouses.*

| Warehouses.                  | Winter<br>wheat. | Spring<br>wheat. | Corn.  | Oats.  | Rye.  | Barley. | Total.  |
|------------------------------|------------------|------------------|--------|--------|-------|---------|---------|
| Central B.....               | 419              | 81               | 9,717  | 1,798  | 178   | 254     | 12,447  |
| C. B. & Q., A. B. C. D.....  | 463              | 432              | 18,570 | 1,212  | 440   | 142     | 21,259  |
| City, Union & St. Paul.....  | 305              | 775              | 8,635  | 887    | 178   | 1,102   | 11,882  |
| Air Line, Galena & Iowa..... | 193              | 765              | 7,119  | 2,085  | 182   | 1,088   | 11,435  |
| Indiana.....                 | 1,074            | 132              | 7,993  | 415    | 72    | 1       | 9,627   |
| Alton.....                   | 805              | 1,631            | 428    | 205    | 256   |         | 3,325   |
| Armour.....                  | 1,024            | 2,569            | 8,429  | 2,937  | 299   | 153     | 15,411  |
| Santa Fe.....                | 1,800            | 543              | 7,913  | 322    | 59    |         | 10,637  |
| Rock Island A.....           | 515              | 290              | 13,317 | 2,829  | 200   | 69      | 17,229  |
| Rock Island B.....           | 22               | 11               | 3,861  | 27     | 34    | 11      | 3,966   |
| National & St. Louis.....    | 864              | 18               | 2,672  | 371    | 45    |         | 3,970   |
| Pacific.....                 | 56               | 983              | 448    | 373    | 270   | 29      | 2,159   |
| Neely.....                   | 130              | 89               | 484    | 360    | 219   | 2       | 1,284   |
| Illinois River.....          | 483              | 395              | 2      |        |       |         | 880     |
| Totals.....                  | 8,156            | 8,714            | 89,528 | 13,821 | 2,432 | 2,851   | 125,502 |

## EXHIBIT B.

*Showing the Number of Cars, Canal Boats and Vessels from which Grain was received into the several Public Warehouses of Chicago during the year ending October 31, 1890, and the number of said Cars, Canal Boats and Vessels, Warehouse Receipts for the contents of which have not been Registered.*

| Names of Firms.                                     | No. of warehouses. | Names of Warehouse.  | NUMBER RECEIVED. |               |               | NUMBER NOT REGISTERED. |               |               |
|---|--------------------|--|------------------|---------------|---------------|------------------------|---------------|---------------|
|   |                    |  | Cars .....       | Canal boats.. | Vessels ..... | Cars .....             | Canal boats.. | Vessels ..... |
| Central Elevator Co. ....                           | 2                  | Central A, B and Annex .....                                   | 12,447           |               |               | 212                    |               |               |
| Dole & Co. ....                                     | 5                  | C, B, & Q, A, B, C, D and Annex .....                          | 21,259           |               |               | 64                     |               |               |
| The City of Chicago Grain Elevators (limited) ..... | 7                  | City, Fulton, Union, St. Paul, Air Line, Galena and Iowa ..... |                  | 174           | 2             |                        | 3             |               |
| Chas. Counselman & Co. ....                         | 1                  | Rock Island A. ....  | 23,317           |               |               | 392                    |               |               |
| Congdon & Co. ....                                  | 1                  | Rock Island B. ....  | 17,220           |               |               | 135                    |               |               |
| Chicago Elevator Co. ....                           | 2                  | Walash and Indiana .....                                       | 3,466            |               |               | 13                     |               |               |
| National Elevator & Dock Co. ....                   | 2                  | National & St. Louis .....                                     | 9,627            | 99            |               | 218                    | 3             |               |
| Chicago & Pacific Elevator Co. ....                 | 1                  | Pacific B. ....  | 3,970            | 136           |               | 16                     |               |               |
| Armour Elevator Co. ....                            | 1                  | Armour .....   | 2,159            |               |               | 55                     |               |               |
| Samia Fe Elevator & Dock Co. ....                   | 1                  | Samia Fe .....   | 15,411           | 12            | 1             | 109                    |               |               |
| George A. Seaverns .....                            | 1                  | Alton and Annex .....  | 16,637           |               |               | 85                     |               | 1             |
| Illinois River Elevator Co. ....                    | 2                  | Illinois River .....   | 3,325            | 16            | 3             | 13                     |               |               |
| Illinois Trust & Savings Bank .....                 | 1                  | Neely .....  | 880              |               |               | 6                      |               |               |
|   |                    |  | 1,284            | 2             |               | 20                     |               |               |
| Totals .....  | 27                 |  | 125,562          | 439           | 6             | 1,372                  | 6             | 1             |

## EXHIBIT C.

*Showing the Number and Disposition of Appeals from the Decision of the Grain Inspection Department to the Committee of Appeals, during the year ending October 31, 1890.*

| Date.                | INSPECTION SUSTAINED. |       |       |       |         |        | INSPECTION CHANGED. |       |       |       |         |        |
|----------------------|-----------------------|-------|-------|-------|---------|--------|---------------------|-------|-------|-------|---------|--------|
|                      | Wheat.                | Corn. | Oats. | Rye.  | Barley. | Total. | Wheat.              | Corn. | Oats. | Rye.  | Barley. | Total. |
| November 1889.....   | 45                    | 2     | 6     | 1     | .....   | 54     | 43                  | 15    | 12    | ..... | 3       | 72     |
| December, 1889.....  | 44                    | 31    | ..... | ..... | .....   | 75     | 38                  | 45    | 1     | ..... | .....   | 84     |
| January, 1890.....   | 26                    | 28    | ..... | ..... | .....   | 54     | 12                  | 50    | 1     | ..... | .....   | 63     |
| February, 1890.....  | 1                     | 18    | ..... | ..... | .....   | 19     | 4                   | 10    | ..... | 1     | .....   | 19     |
| March, 1890.....     | 8                     | 85    | ..... | ..... | .....   | 93     | 9                   | 75    | 13    | ..... | .....   | 97     |
| April, 1890.....     | 4                     | 16    | 3     | ..... | .....   | 23     | 6                   | 39    | 10    | ..... | .....   | 46     |
| May, 1890.....       | 27                    | 2     | 1     | ..... | .....   | 30     | 26                  | 3     | 7     | ..... | .....   | 36     |
| June, 1890.....      | 9                     | 6     | ..... | ..... | .....   | 15     | 12                  | 12    | 2     | ..... | .....   | 29     |
| July, 1890.....      | 17                    | ..... | ..... | 1     | 1       | 18     | 15                  | 3     | ..... | 3     | .....   | 19     |
| August, 1890.....    | 22                    | ..... | 2     | ..... | 2       | 26     | 19                  | ..... | ..... | 1     | .....   | 25     |
| September, 1890..... | 11                    | 1     | 1     | ..... | 1       | 14     | 12                  | ..... | 2     | ..... | 2       | 15     |
| October, 1890.....   | 19                    | 1     | 1     | ..... | 4       | 25     | 9                   | ..... | 2     | ..... | .....   | 11     |
| Totals.....          | 233                   | 190   | 18    | 2     | 8       | 451    | 204                 | 250   | 51    | 6     | 5       | 516    |

NOTE—Included in above are 1 canal boat of wheat and 3 canal boats of corn changed and 1 canal boat of wheat sustained.



# EXHIBIT D.

*A Comparative Statement of the Amount of Grain Annually Received into Store by the Public Warehouses of Chicago, from 1882 to 1890, both inclusive, and of the Number of Cars, Canal Boats and Vessels from which such Grain was received; also, the number of Bushels shipped from the Public Warehouses during said time.*

|                            | 1882.      | 1883.      | 1884.      | 1885.      | 1886.      | 1887.      | 1888.      | 1889.       | 1890.      |
|----------------------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| Bushels received.....      | 57,687,008 | 78,724,751 | 57,550,974 | 51,175,511 | 62,022,522 | 68,543,823 | 78,505,602 | 98,635,862  | 86,015,478 |
| Bushels shipped.....       | 64,331,863 | 73,307,290 | 59,432,864 | 46,178,593 | 61,747,078 | 75,754,811 | 73,708,947 | 101,708,230 | 85,895,930 |
| Number of cars.....        | 105,440    | 143,946    | 103,233    | 90,404     | 103,537    | 108,402    | 119,644    | 148,534     | 125,502    |
| Number of canal boats..... | 580        | 464        | 357        | 167        | 506        | 522        | 319        | 465         | 439        |
| Number of vessels.....     | 18         | 10         | 1          | .....      | 1          | .....      | 1          | .....       | 6          |

*A Statement Comparing the Number of Cars Annually Inspected on Track, from 1882 to 1890, both inclusive, with the Number Received in Store during the same Years.*

|                                | 1882.   | 1883.   | 1884.   | 1885.   | 1886.   | 1887.   | 1888.   | 1889.   | 1890.   |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Inspected on track.....        | 171,218 | 235,213 | 210,822 | 212,270 | 201,103 | 189,130 | 211,818 | 249,883 | 272,956 |
| Received into store.....       | 105,440 | 143,946 | 103,233 | 90,404  | 103,537 | 108,402 | 119,644 | 148,534 | 125,502 |
| Inspected, but not stored..... | 65,778  | 91,267  | 107,589 | 121,866 | 97,146  | 80,728  | 92,174  | 101,249 | 147,454 |

## EXHIBIT E.

*Storage Capacity of Chicago Elevators of Class A, at the date of this Report.*

| Names of Elevators.            | Proprietors.                           | Grain received from—                       | Capacity—bushels. |
|--------------------------------|--|--|-------------------|
| Central A.....                 | Central Elevator Co.....               | Illinois Central Railroad.....             | 1,000,000         |
| Central B and annex.....       | Central Elevator Co.....               | Illinois Central Railroad.....             | 1,500,000         |
| C., B. & Q., A.....            | Dole & Co.....                         | Chicago, Burlington & Quincy Railroad..... | 1,200,000         |
| C., B. & Q., B.....            | ".....                                 | ".....                                     | 1,200,000         |
| C., B. & Q., C.....            | ".....                                 | ".....                                     | 750,000           |
| C., B. & Q., D. and annex..... | ".....                                 | ".....                                     | 1,500,000         |
| Union.....                     | The City of Chi. Grain El. (Ltd.)..... | Chicago, & Northwestern.....               | 2,500,000         |
| City.....                      | ".....                                 | Chicago, & Northwestern.....               | 2,500,000         |
| Fulton.....                    | ".....                                 | Chicago, Milwaukee & St. Paul.....         | 900,000           |
| Air Line.....                  | ".....                                 | Chicago, Milwaukee & St. Paul.....         | 350,000           |
| Galena.....                    | ".....                                 | Chicago, & Northwestern.....               | 650,000           |
| Iowa.....                      | ".....                                 | ".....                                     | 670,000           |
| St. Paul.....                  | ".....                                 | Chicago, Milwaukee & St. Paul.....         | 1,150,000         |
| Wabash.....                    | The Chicago Elevator Co.....           | Wabash, St. Louis & Pacific.....           | 850,000           |
| Indiana.....                   | ".....                                 | ".....                                     | 1,500,000         |
| Rock Island A.....             | Chas. Counselman & Co.....             | Chicago, Rock Island & Pacific.....        | 1,500,000         |
| Rock Island B.....             | Congdon & Co.....                      | ".....                                     | 1,400,000         |
| National.....                  | National Elevator and Dock Co.....     | Chicago, Alton & St. Louis.....            | 1,400,000         |
| St. Louis.....                 | ".....                                 | ".....                                     | 1,400,000         |
| Pacific B.....                 | Chicago & Pacific Elevator Co.....     | Chicago, Milwaukee & St. Paul.....         | 850,000           |
| Armour.....                    | Armour Elevator Co.....                | ".....                                     | 800,000           |
| Santa Fe.....                  | Santa Fe Elevator and Dock Co.....     | ".....                                     | 1,000,000         |
| Alton and annex.....           | George A. Seaverns.....                | Atchison, Topeka & Santa Fe.....           | 2,500,000         |
| Illinois River.....            | Illinois River Elevator Co.....        | Chicago, Alton & St. Louis.....            | 1,500,000         |
| Neely.....                     | Illinois Trust and Savings Bank.....   | Chicago, Milwaukee & St. Paul.....         | 150,000           |
| Total capacity.....            |  |  | 28,340,000        |

## EXHIBIT F.

*Showing the Amounts of the Different Kinds of Grain and the Total Amount in Store in the Public Warehouses of Chicago, at the close of Each Week during the Year ending October 31, 1890.*

| Date.             | Wheat.    | Corn.     | Oats.     | Rye.    | Barley. | Total.     |
|-------------------|-----------|-----------|-----------|---------|---------|------------|
| 1889.             |           |           |           |         |         |            |
| November 2.....   | 2,599,887 | 1,569,620 | 2,704,000 | 461,602 | 334,313 | 7,669,422  |
| November 9.....   | 2,841,280 | 957,676   | 2,624,555 | 392,442 | 315,641 | 7,131,594  |
| November 16.....  | 2,989,412 | 862,222   | 2,005,866 | 383,710 | 231,617 | 6,472,827  |
| November 23.....  | 3,468,217 | 826,311   | 1,785,197 | 365,503 | 215,907 | 6,661,135  |
| November 30.....  | 4,055,141 | 1,000,862 | 1,641,043 | 393,813 | 224,997 | 7,335,856  |
| December 7.....   | 4,421,109 | 746,127   | 1,691,471 | 435,785 | 245,626 | 7,540,118  |
| December 14.....  | 4,753,696 | 782,837   | 1,754,111 | 442,806 | 292,219 | 8,025,169  |
| December 21.....  | 4,954,747 | 958,748   | 1,776,503 | 473,460 | 333,617 | 8,497,075  |
| December 28.....  | 5,038,573 | 1,355,121 | 1,724,972 | 458,119 | 322,835 | 8,899,626  |
| 1890.             |           |           |           |         |         |            |
| January 4.....    | 5,101,104 | 1,780,639 | 1,708,571 | 487,465 | 320,242 | 9,401,021  |
| January 11.....   | 5,236,033 | 2,165,592 | 1,754,292 | 520,344 | 310,554 | 9,986,815  |
| January 18.....   | 5,175,828 | 2,246,048 | 1,652,033 | 529,815 | 299,404 | 9,903,128  |
| January 25.....   | 5,043,360 | 2,329,417 | 1,502,887 | 562,287 | 276,526 | 9,714,477  |
| February 1.....   | 5,066,177 | 2,482,958 | 1,509,413 | 591,756 | 256,287 | 9,906,591  |
| February 8.....   | 4,988,822 | 2,486,292 | 1,501,730 | 609,527 | 225,072 | 9,811,443  |
| February 15.....  | 4,968,826 | 2,576,916 | 1,501,538 | 626,672 | 244,675 | 9,818,627  |
| February 22.....  | 4,695,096 | 2,739,840 | 1,461,408 | 683,061 | 285,890 | 9,865,295  |
| March 1.....      | 4,621,661 | 3,192,911 | 1,469,021 | 759,676 | 302,461 | 10,345,730 |
| March 8.....      | 4,426,256 | 3,912,635 | 1,455,834 | 689,964 | 300,646 | 10,785,335 |
| March 15.....     | 4,297,957 | 4,703,116 | 1,465,585 | 696,691 | 309,851 | 11,473,200 |
| March 22.....     | 4,259,068 | 6,294,888 | 1,461,630 | 698,067 | 290,690 | 13,004,343 |
| March 29.....     | 4,230,260 | 8,315,044 | 1,471,688 | 700,867 | 266,634 | 14,984,493 |
| April 5.....      | 4,185,183 | 8,957,319 | 1,440,397 | 698,048 | 240,220 | 15,521,167 |
| April 12.....     | 4,125,446 | 8,729,863 | 1,379,626 | 638,694 | 210,879 | 15,084,508 |
| April 19.....     | 4,163,098 | 6,551,501 | 1,025,278 | 578,434 | 163,024 | 12,481,335 |
| April 26.....     | 4,147,418 | 5,535,027 | 655,023   | 496,044 | 156,873 | 10,990,385 |
| May 3.....        | 4,027,632 | 4,590,299 | 860,264   | 507,673 | 139,519 | 10,125,387 |
| May 10.....       | 4,020,603 | 3,788,379 | 796,072   | 405,937 | 136,204 | 9,147,195  |
| May 17.....       | 4,125,448 | 3,350,059 | 826,594   | 341,458 | 125,323 | 8,708,882  |
| May 24.....       | 4,366,012 | 3,581,850 | 1,237,483 | 340,384 | 116,984 | 9,642,713  |
| May 31.....       | 4,520,852 | 4,624,475 | 2,218,302 | 372,700 | 71,175  | 11,807,504 |
| June 7.....       | 4,574,333 | 6,258,505 | 2,015,062 | 337,270 | 32,205  | 13,217,275 |
| June 14.....      | 4,674,197 | 6,788,344 | 1,366,888 | 380,759 | 22,676  | 13,232,864 |
| June 21.....      | 4,721,728 | 6,520,017 | 1,233,536 | 333,994 | 20,317  | 12,829,592 |
| June 28.....      | 4,628,299 | 6,083,407 | 987,080   | 250,449 | 3,032   | 11,952,267 |
| July 5.....       | 4,163,201 | 5,593,304 | 801,222   | 229,145 | 3,691   | 10,790,563 |
| July 12.....      | 3,888,309 | 5,056,419 | 442,711   | 227,182 | 3,691   | 9,618,312  |
| July 19.....      | 4,011,756 | 4,637,550 | 383,027   | 232,837 | 3,691   | 9,268,661  |
| July 26.....      | 4,029,734 | 4,059,845 | 249,529   | 259,973 | 5,929   | 8,605,010  |
| August 2.....     | 4,224,256 | 4,122,709 | 291,185   | 205,648 | 6,153   | 8,849,951  |
| August 9.....     | 4,424,344 | 4,013,009 | 483,459   | 239,854 | 18,378  | 9,179,044  |
| August 16.....    | 4,403,107 | 3,684,653 | 596,699   | 250,089 | 20,068  | 8,954,616  |
| August 23.....    | 4,302,407 | 2,430,713 | 882,760   | 268,353 | 29,627  | 8,913,860  |
| August 30.....    | 4,400,230 | 2,976,637 | 1,095,512 | 266,050 | 84,715  | 8,853,144  |
| September 6.....  | 4,482,808 | 2,750,969 | 1,155,438 | 298,732 | 87,847  | 8,775,794  |
| September 13..... | 4,610,321 | 3,123,275 | 1,188,346 | 321,714 | 113,668 | 9,357,324  |
| September 20..... | 4,822,119 | 2,806,765 | 997,907   | 331,611 | 171,997 | 9,130,399  |
| September 27..... | 4,902,561 | 2,726,954 | 936,411   | 336,212 | 251,856 | 9,153,994  |
| October 4.....    | 4,824,132 | 2,605,656 | 1,189,972 | 323,629 | 365,563 | 9,308,952  |
| October 11.....   | 4,708,338 | 2,066,204 | 1,059,260 | 318,697 | 419,156 | 8,571,655  |
| October 18.....   | 4,622,990 | 2,031,511 | 753,002   | 305,660 | 493,548 | 8,206,711  |
| October 25.....   | 4,836,076 | 2,184,862 | 660,296   | 292,596 | 530,801 | 8,504,581  |
| November 1.....   | 4,847,364 | 1,568,191 | 778,165   | 318,726 | 598,521 | 8,110,967  |



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# APPENDIX.

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## No. I.

## RAILWAY SAFETY APPLIANCES.

REPORT OF CHAS. HANSEL, CONSULTING ENGINEER, PREPARED  
UNDER DIRECTION OF THE COMMISSION AND REFERRED  
TO IN THEIR REPORT.

SPRINGFIELD, ILL., Sept. 29, 1890.

*The Honorable Railroad and Warehouse Commission, Springfield, Ill.:*

GENTLEMEN—I herewith respectfully transmit my report bearing upon safety appliances in railway operation in accordance with your instructions given under date of July 23, 1890, viz.:

“It is ordered that Chas. Hansel, consulting engineer, be requested to make a full and exhaustive examination of the latest railroad appliances, such as couplings, brakes, frogs and the like, having for their object the preservation of the lives and limbs of employes and the traveling public; and that he report to the Commission the result of such examination with his conclusions thereon.”

While the slow and old fashioned way of getting from point to point may be a better thing to have in the memory, the journey of to-day is barren of all save results, and the public interest now centers on questions of safety and speed.

Since the opening of the Liverpool and Manchester railroad in 1830 and the killing of the first passenger, Mr. Huskisson, contrary to the gloomy prediction of the coachman that “God in his anger against our great Stephenson would strew the land with shattered limbs,” the fatality incident to railway travel as compared with the old time coach, is greatly in favor of the railroad. To determine upon the best among the countless numbers of appliances for safety in railway travel would require the earnest thought and examination of a congress of railway experts.

The field for investigation answering to the above is so extensive that I could not hope to do justice to all the topics which naturally present themselves, in the time and space allotted to this report.

By examination of Table I, which has been compiled from statistics found in report of Inter-State Commerce Commission, and from the last report of your Commission, you will find that all accidents arising from coupling and uncoupling cars, falling from trains and engines, overhead obstructions, collisions, derailments, other train accidents, at highway crossings and at stations are enumerated, giving for the United States two thousand nine hundred and forty-nine killed, and fifteen thousand four hundred and twenty-nine injured, leaving unaccounted for the cause of killing two thousand eight hundred and seventy-four and injuring three thousand eight hundred and eighty.

Of this number two thousand two hundred and fifteen were neither passengers nor employes and were probably trespassers. The killing of five hundred and thirty-nine employes and one hundred and twenty passengers may be accounted for by defective track, rolling stock and bridge failures.

When we consider the ratio of the number of trainmen employed (138,323) to the number killed or injured (1,179 killed and 11,301 injured) the result is appalling, 1 death for every 117 trainmen and 1 injury for every 12 trainmen employed.

During the year there were carried 472,171,346 passengers in the United States, of which number 310 were killed and 2,146 injured, or one killed for 1,523,133 carried and one injured for each 220,024 carried.

When we consider the number of persons employed (704,743) as compared with the number of passengers carried, it is manifest that the work of the railroad employé is a dangerous calling and in considering safety appliances in railway operation we should look first to such devices as will tend to reduce the frightful results incident to it.

After careful examination of the various appliances and requirements for the safe operation of railways I have chosen for special report the following subjects:

1. Brakes.
2. Couplers.
3. Block signals.
4. Signals.
5. Interlocking.
6. Freight cars.
7. Maintenance of way.
8. Highway crossings.
9. Heating passenger cars.
10. Lighting passenger cars.

#### BRAKES.

For some years after the construction of the first railroad but little attention was given to the stopping of trains, the chief aim being the perfecting of the motive power.

The problem of how to stop was overlooked in the public interest of how to go. To-day the perfected air-brake for passenger service leaves but little to desire. The conditions incident to freight service presents many difficult points in operation, owing to the running of foreign cars with those owned by company, about 75 per cent. of the total number of freight cars hauled being foreign.

The improved equipment will naturally be put upon cars that remain at home and cars used in fast service for special freight, as stock, refrigerator cars and such, and cars operated on roads with sharp grades will be furnished with power brakes first; whereas roads using easy and uniform gradients will not change from hand to power brakes as soon.

Some of the requirements for perfect freight brakes are;

1. That all the brakes of the whole train shall be under the control of the engineer.
2. That the brakes be automatic; that is, self applied in case of accident causing separation of train.
3. That all the brakes of a train shall work uniformly in stopping.
4. That the full power of the brake action be available on the steepest grades.
5. That it be simple in construction, easily repaired and not expensive to apply or maintain.

A power brake fulfilling these requirements is now in use on the passenger equipment of the United States, and in most of the States, passenger trains are not permitted to be run without automatic train brakes.

The progress made in equipping freight cars is not so favorable, owing in great part to first cost. The first concerted action taken by railroads for the purpose of advancements toward the equipment of freight cars with automatic brakes was through the Society of Master Car Builders, representing the principal railroad companies of the United States, at their annual meeting in 1883, at which time they appointed a committee to report on "automatic freight car brakes," at the next annual meeting. The report of this

committee was meager and throw no new light on the practicability of automatic or power brakes for freight cars. This committee was discharged and a new one appointed and reported in 1885 upon (1) Buffer brakes, (2) Friction brakes, (3) Air-brakes, and (4) Electric brakes. The report favors air-brakes and the committee recommend experimental trials to prove the qualities of the several brakes in question. This recommendation was approved and the committee invited the manufacturers of automatic freight car brakes to a competitive test to be held at Burlington, Iowa, on December 14, 1885, and on May 14, 1886. That we may follow the workings of this test and gain knowledge from this most important trial which demonstrated not only the necessity, economy and life-saving results obtained by use of power brake, but threw new light upon the much vexed question of automatic couplers which is of co-equal importance, both from humane and economic view. I think it well to follow briefly the record of the tests.

Five companies entered into the contest of 1886, namely the Westinghouse Automatic Brake Co., The Eastern Vacuum Brake Co., The American Brake Co., The Widdifield and Button Brake Co., and the Rote Brake Co. These competitors may be classed as representing two types of brakes, the continuous or air-brake by the Eames and Westinghouse and the independent or buffer brakes by the other three companies.

The tests opened July 13th, and continued without interruption until August 3d, 1886. The rules governing the trial proved a severe test on the efficiency of the several styles of brakes and early in the contest, the Rote, Widdifield and Button brakes were shown to be inferior to the others and the results of all the tests was disappointing, although the Westinghouse seemed to more nearly meet the requirements. The committee of M. C. B. Society decided to give the several companies opportunity to improve upon the weak points brought out by the tests and a second trial was commenced May 9th, 1887, the brakes represented being the Westinghouse, Carpenter, Eames, and Hanscom. The tests continued to the 29th day of May, and while much valuable knowledge was given to all interested, the committee did not recommend the adoption of any form of brake and closed their report with the following conclusions, which in the light of the exhaustive tests then completed seemed proper.

“First—That the best type of brake for long freight trains is one operated by air and in which the valves are actuated by electricity.

Second—That this type of brake possesses four distinct advantages :

- (a) It stops the train in the shortest possible distance.
- (b) It abolishes shocks and their attending damage to equipment.
- (c) It releases instantaneously.
- (d) It can be graduated perfectly.”

Since this report was made I have witnessed many trials of brakes with remarkable results, and I am of the opinion that there is now a brake in the market which may be relied upon in any kind of freight service.

As the Westinghouse automatic brake is used to a greater extent than any other on the railroads of the United States—of 35,000 passenger cars in the United States, Canada and Mexico nearly all are equipped with this brake, also about 20,000 locomotives, and when orders now in shop are filled about 150,000 freight cars will have been equipped—I will include a brief description of its parts as best representing the most approved type of the most important of all safety appliances.

The diagram of parts as applied to engine and tender for either passenger or freight service is shown on plate numbered II, diagram showing application to freight service on plate III. (*Note*—As passenger cars must be equipped with air brakes on, special description is considered necessary in this report.)

The first appliance necessary, and upon which the whole system depends for its power is the *steam engine and pumps*, which produces the compressed air. This is placed on engineman's side of locomotive, in plain view of engineman. The compressed air is led from the air pump to the *main reservoir* and stored there at a pressure of 70 to 80 pounds per square



inch. The *engineer's brake valve*, a very ingenious piece of mechanism, is located in the cab convenient to the left hand of the engineman. This valve gives the engineman power to regulate the flow of air from main reservoir to *main brake pipe* for releasing the brakes, and to the atmosphere for applying brakes. An *auxiliary reservoir* is attached to bottom of tender, same as on passenger car, which is used to store a supply of air for the brake cylinder.

The *brake cylinder* is attached to bottom of car and connected with the foundation brake gear in such manner that when the piston is forced out by air pressure the brakes are applied.

Probably the greatest advance made in the construction of air brakes since its advent is in the construction of the *triple valve*.

The *triple valve*, which connects the brake pipe to the auxiliary reservoir and connects the latter to the brake cylinder, and is operated by a sudden variation of pressure in the brake pipe so as to admit air from the auxiliary reservoir to the brake cylinder, which applies the brakes, at the same time cutting off the communication from the brake pipe to the auxiliary reservoir, or to restore the supply from the brake pipe to the auxiliary reservoir, at the same time letting the air in the brake cylinder escape, which releases the brakes. It is the reduction of pressure in the train pipe which causes the brakes to be applied.

The couplings are attached to flexible hose and connect the brake pipe of the two cars.

The reservoir and brake cylinder are severally bolted together for freight services, making a cheaper form and avoiding the pipe connections.

The latest statistics give the number of locomotives in service in the United States to be 29,036, of which 17,995 are equipped with automatic train brake: of the 961,119 freight cars 93,475, or less than 10 per cent., are fitted with automatic train brake. At the close of the year 1887 but 50,000 freight cars were equipped with automatic train brake, showing an increase of 43,475 in two years. In following the distribution of cars thus equipped I find the Atchison, Topeka & Santa Fe leading with 20,000 cars, Union Pacific second with 12,902, and Southern Pacific third with 12,043. This important reform is making rapid progress and shows that the companies which are taking the lead are the greatest of the country, and their lead in such important matters of technical and financial importance will eventually be followed by minor corporations.

Why do these great corporations equip their cars with this system of brakes? Is it for the sole purpose of saving human life or lessening the possibility of injury to those whose duty requires them to be on top of cars in train?

There can be no doubt as to the crying need of such devices, from a humane point of view, and there is no question of the practicability of the air brakes, for if there were any doubt 86 prominent railroads of this country would not use it for standard. I think there is no question as to the economy of its use aside from the question of humanity. The price of a good air brake is about 45 dollars per car. With the automatic air brake broken grades may be utilized and momentum used in descending grades, and by a fluctuating schedule of speed to conform to profile, 15 to 20 per cent. in train load may be gained. The saving to rolling stock is considerable, and the frightful aggregate of accidents from collisions, breakaways, falls from moving trains, overhead obstructions and injuries from exposure may be saved.

Railroads doing business in this State report 196,477 freight cars in service, of which but 5,158 are equipped with train brake. The railway mileage of the United States, as reported by Inter-State Commerce Commission for year ending June 30, 1889, is 157,758.83. This is probably incorrect, as some lines operating wholly within a State decline to make official report to this Commission. The mileage reported officially is 149,948.66, giving Illinois 9,829.48, instead of 9,936.63, as reported officially to your Commission. Total freight cars in service reported by Inter-



State Commission is 961,119. Assigning 557 cars to each 100 miles operated within this State, we have 55,347 cars apportioned to Illinois. Official report from lines doing business in this State, gives 239,773 cars. Apportioning locomotives on basis of 19 for each 100 miles operated, gives 1,888; number reported owned by lines doing business in this State, 6,802.

Cost of equipping 1,888 locomotives with air, at \$450.00 each, \$849,600.00; cost of equipping 55,347 freight cars with air, at \$45.00 each, \$2,490,615.00. Total cost for equipping locomotives and freight cars, \$3,340,215.00, or about 8.5 per cent. of the total gross freight earnings of the lines in this State for the year ending June 30, 1889.

As much has been written and said concerning the great loss of life incident to railway employment in the United States as compared with the United Kingdom, some comparison of equipment may be pertinent.

The English freight car, called in England "goods wagon," is about 15.5 feet long, with four wheels, carries a load of eight tons and weighs five tons, being 1.6 to 1. while the American box car is about 34 feet long, carrying 50,000 to 60,000 pounds, and weighs 23,000 to 28,000 pounds, the proportion is 2.13 to 1. Only about 20 per cent. of the freight cars have brakes of any kind, and are coupled by heavy chains, which gives one foot of free slack between cars. The brakes are placed so that they cannot be worked while train is in motion. In rear of train is caboose with brake. This, with brake on engine and tender, is the only brake power that can be applied while the train is in motion. On long trains or steep grades brake vans are attached. Owing to the lowness of bridges and tunnels brakemen cannot walk over top of cars and apply brakes. This use of extra brake vans is expensive, but with its aid, and with the general uniform and low gradients of English roads, it is possible to move trains rapidly and with few accidents, and the casualties from falling from cars, overhead obstructions and coupling is brought to a minimum.

The coupling of cars with us is so closely allied with the use of brakes that the subjects might well be considered together. The conclusions concerning several appliances of which this report will make mention will be given in the addenda.

#### CAR COUPLERS.

There is probably no reform in the operation of railroads which is occupying the minds of railroad managers, State commissions and thinking men as the much discussed problem of a uniform, safe and reliable car coupler. The form of link and pin has been with us from the first, and is still held by many to be the best yet devised. The frightful fatality attending the business of coupling and uncoupling cars has called attention to the necessity of improvement, and the inventor's skill has for years been employed in an effort to produce a coupler that will answer the requirements under all conditions of traffic, and be sufficiently cheap to warrant changing from the old style.

During the year ending June 30, 1889, 300 employ es were killed in coupling and uncoupling cars, and 6,759 were more or less mangled. Of this number, 21 were killed on lines in this State and 444 injured.

Not less than 10,000 applications have been made for patents on car couplers, and it is from this aggregation of ideas that we are called upon to select a type.

In this State, an act approved March 31, 1874, in force July 1, 1874, provides for automatic coupling, "or other coupling which will secure personal safety," for passenger cars only. No provision was made, nor at any time since has the subject of automatic couplers for freight cars been a subject of State legislation.

The Miller hook is used exclusively on passenger cars, and it is seldom, if ever, that one can find a passenger car which is not equipped with some form of automatic coupler. I do not understand that the coupling of pas-

senger cars was, or is, considered more dangerous than the coupling of freight cars, and whether this action of the legislature was intended for the protection of trainmen whose duty it is to couple or uncouple cars, or for the comfort of passengers. I am not advised.

The force of public opinion was brought to bear on the legislature of Massachusetts, which referred the subject of freight drawbars and couplers to the Board of Railroad Commissioners to report on same at next general court. The Board, after examination, recommended the Safford drawbar or some other form of automatic coupler. In 1884 an act of Massachusetts again ordered cars to be equipped with such forms of automatic coupler as may be recommended by the commissioners. The commissioners held meeting for examination of couplers Sept. 25, 1884, representatives of the commissions of Ohio, Iowa and Michigan being present. After making such tests as were possible, the commission adopted the Janney, Hilliard, Cowell, United States and Ames. Subsequent trial and use of these couplers shows that the Janney and Ames are best fitted for the purpose. The latest statistics showing 83,788 freight cars equipped with automatic couplers. Of this number Janney, 17,536; Hilliard, 1; Cowell, 61; United States, 425; Ames, 11,808. The Boston automatic coupler was added to their list in 1887, although it does not appear that it was used by any railroad.

In year 1888 there were 5,000 approved couplers in the State of Massachusetts, and out of a total of nine accidents in coupling and uncoupling, eight occurred in coupling old with approved style. The commission, seeing the difficulty of curing this evil through State legislation, recommended in their report to the Legislature that the Inter-State Commerce Commission be instructed to consider what can be done to prevent the loss of life, etc. This Legislature adopted this resolution and forwarded to Congress a memorial requesting federal legislation.

Connecticut ordered safety couplers on freight cars in 1882.

Michigan enacted law in 1886 authorizing use of Aikman, Ames, Blocker, Cowell, Marks, McCree and Perry, and in report of 1888 the Commissioner says, "It does not appear that the substitution of automatic for old style of coupling has as yet begun to furnish anticipated results in the decrease of coupling accidents." The Janney and Dowling couplers were added to the first list.

New York, in act, required that after July 1st, 1886, no coupler shall be used upon any new freight car unless same can be coupled or uncoupled without the necessity of going between cars, etc. In 1889 the Commission of New York also favored the putting of this matter within the jurisdiction of the Inter-State Commerce Commission.

It appears that in these States, where the Commissions are composed of intelligent men seeking for a remedy for this evil, that after trial extending over a period of years, and with the assistance of the Legislature of their respective States, they are dissatisfied with the results of their work, and appeal to Congress for legislation.

During this time the Society of Master Car Builders made this subject a matter of earnest examination, and at the 17th annual convention, held in Chicago, June, 1883, a committee was appointed to report on automatic freight car couplers at the next annual meeting. This committee submitted its report at the next annual meeting, making no selection, and concluding their report as follows: "In conclusion the committee will say that they realize the importance and magnitude of the work which has been given them, and they would therefore urge upon the members of the association the importance of thoroughly discussing the merits of car couplers."

This question was made a subject for consideration at a special meeting in 1885, at which time the following resolution was passed:

"*Resolved*, That it is the opinion of this convention that the independent action of State Legislatures enforcing the use of some form of automatic or safety coupler is already resulting in greater danger to employes coup-

ling cars than they were subject to before such action went into effect, and that any similar further action of Legislature will greatly increase the danger to employés."

A study of the requirements of an automatic freight coupler will present the following conditions:

1. That they be coupled and uncoupled without requiring men to go between the cars.
2. That whatever the relative heights of the couplers, they couple and uncouple equally well.
3. That free slack, as far as possible, be dispensed with to reduce damage to equipment and freight.
4. That cars be coupled easily and with a minimum of concussion to encourage careful handling of cars.
5. That they be simple and durable and at a minimum cost.
6. That the couplings at both ends of a car be alike.
7. That there be no loose parts to be lost.
8. That they couple on curves.
9. That they couple with certainty and remain so without danger of parting on road.
10. That they be such as act favorably with brakes.
11. That the coupling and uncoupling be unobstructed by inclement weather.
12. And most essential of all, that the coupling be universal, or readily coupled with all other couplers.

Is there a coupler now made which will meet these requirements? Very many people think this problem unsolved and probably unsolvable.

The M. C. B. society after throwing down the gauntlet in their resolution against State legislation, realized that they must take decided action. Railroad commissioners were invited to a trial of couplers held at Buffalo September, 1885, at which trial 42 makes of couplers were entered, 19 of which might be classed with loose link couplers, 2 as fixed link, 12 as hook couplers, coupling in vertical plane, 3 as loose coupling bar couplers, 3 hook couplers, coupling in a horizontal plane, 3 miscellaneous couplers. After testing these various designs the committee recommended two of the first class, three of the second, one of the third class, four of the fourth class and one of the fifth class for further trial.

At the 21st annual meeting of the Master Car Builders' Society, it was decided to submit the following recommendation for decision by letter ballot, that the Janney type of coupler be recommended as the standard form of coupling.

The result of this ballot showed that 474 votes were in favor of the adoption of the Janney type of coupler, and 194 against. The recommendation was therefore declared adopted.

Plan of Master Car Builders' standard automatic coupler and carrier iron is shown on Plate IV. Form of contour lines on inside of jaw is shown on Plate V.

During the year ending December 31, 1889, 40,000 cars were equipped with M. C. B. couplers, making a total in the United States of 56,050. The trunk line roads, the Chicago systems and the Richmond and Danville and Atlantic coast line in the south are the chief movers in this reform. Companies controlling 20,343 miles of railroad have made the M. C. B. type standard. It is in extensive use on 40,000 miles. Four companies alone have 25,000 cars equipped with M. C. B. couplers. When we consider that not more than 8,000 cars were equipped with M. C. B. couplers at the beginning of 1888, it is apparent that the adoption of a standard by the M. C. B. was a great incentive to its general use.



The Engineering News gives number of cars equipped with M. C. B. coupler prior to 1888 as 6,000, cars equipped during 1888 as 15,000, cars equipped during 1889, 30,000. This statement probably does not cover all cars so equipped, but is in itself sufficient evidence to indicate the great advance made in this work.

I have conferred with the general officers of many of the leading railroads, both in person and by letter, and have found few who criticised the M. C. B. type of coupler on practical grounds. The effect of the action of the M. C. B. upon the work of inventors is also very marked, in prescribing the lines of its standard the society only defined the contour of the jaw, and any style of coupler conforming to these lines which will interlock with the Janney will be accepted, the method of locking, etc., is left to be improved upon, and inventors, instead of wasting energy in devising a link or other than a vertical plane hook, are devoting their skill to the perfection of the M. C. B. type.

In order that any mechanical device intended for use upon railroads may receive the favor of railway managers, it must have more than the cause of humanity on its side. The question of expense and utility enter first, and notwithstanding public pressure has been brought upon railway officials through technical journals, public spirited men, commissioners of railroads and engineers who have had opportunity to become familiar with the facts. There must be an underlying current of economy to induce so rapid progress as has been shown to have been made during the past year. Railroad companies are ready to pay for improvements which will reduce operating expenses. Probably nothing has demonstrated the value of the close coupler more than the Burlington brake trials. It has long been thought necessary to have free slack in the coupling of cars. This free slack is the cause of breakage of many drawbars and draft rigging in stopping and starting trains, and in operating roads with broken gradients and also very dangerous to trainmen and live freight. During the brake trial it was found necessary to take up all the free slack by blocking the links. The severest pull on the engine comes immediately after all cars in the train have been started, and an engine will start more cars than it will pull. In ascending a grade of fifty feet per mile it was found that train could be started with greater ease with links blocked than with links loose. While the complete elimination of shocks and the attendant danger to life and injury to equipment is a matter of brakes and not of couplers, still the coupler is an important factor, and it is obvious that the close coupler is necessary to reduce the slack to a minimum. Knowing the conditions to be fulfilled by an automatic coupler as set forth hereinbefore, it will be seen that the M. C. B. type may be made to answer to the requirements as indicated in the first eleven conditions.

The cost of equipping a freight car with the M. C. B. coupler is about \$25 per car in place, being little if any more than the cost of the old draw gear. The saving in damage to equipment, while considerable, amounts to little as compared with the increased train loads that can be made by the use of automatic air brakes and couplers. The B. & O., and other roads of like character using broken grades, haul as many passenger cars as the maximum load on more level grades, but there will be found a considerable difference in train loads in freight traffic as between comparatively level grades and fluctuating grades. Why is this? Under a like condition, if a locomotive can pull the same load of passenger cars as over broken grades as the maximum pulled on comparatively level or uniform grades, the freight engine should do similar work in freight service. However, this is not done, and the reason is found principally in the fact that with the combined use of air brakes and close couplers the engineer of the passenger train uses the power of his engine almost continually and by variation in speed, and by using the momentum of his train stored on descending grades he is able to climb grades which would be difficult to surmount if the stored energy acquired on descending grades was not used to lift the train out of the sag. With freight train equipped with hand brakes and loose couplers the engineer dare not raise the speed sufficient to assist in equalizing the profile, and on gradients prescribing short breaks the danger of breakaways

and consequent delay necessitate the constant presence of brakemen on top of cars to equalize the strain on drawbars, and prevent, if possible, the sudden shocks which are liable to break drawbars, injure freight and knock down the stock. To limit the speed of trains to a fixed number of miles per hour, regardless of profile, will certainly reduce the train loads, and the time chart should be made to conform to profile as well as to other necessities of operation. I am of the opinion that this matter will receive greater attention when freight cars are equipped with train brakes and close couplers.

During the past ten years few reports of State Railroad Commissioners, Inter-State Commissioners, journals, gazettes, or of the many societies organized for the promotion of knowledge in railway practice have been without some mention of this question of safe couplers, and no society, excepting the M. C. B., has been bold enough to take decided action in the matter. Since their action in adopting the Janney type as their standard they have been criticised by makers and railway officials, one for adopting any type and the other for not adopting a special device instead of a type. At the March meeting of the New England Railroad Club a paper was read denouncing the action of the M. C. B. on account of their not adopting a standard coupler, contending that a "standard freight car coupler is absolutely necessary for the most complete safety and economy." Admitting the economy but offering no method of relief. The adoption of a standard coupler by any body, State or National, would not insure its replacing all existing drawbars.

The adoption of a type, however, still leaves the field open for competitors, encourages the inventor to improve, and by the survival of the fittest will ultimately give us the ideal coupler, while in using the present M. C. B. type we will have universal interchangeability.

It is true that the breakages of the present form of M. C. B. type is excessive, caused partly by faulty construction, poor material and the necessity of coupling with the old style link and pin. The inventors' skill will no doubt rapidly improve the form, and when the necessity of coupling with link and pin no longer exists the knuckle breakage will be greatly diminished. The cost of furnishing links and pins for the old style drawbar is at the lowest calculation \$2 per year.

Why do links break? Is it caused from the lack of sufficient material to resist the strain necessary in steady pulling? The full resistance of a one and one-half inch link made from good iron is 175,000 pounds and the maximum pull of the average locomotive will not exceed 20,000 pounds. Even reducing the link to the resistance at the elastic limit, its strength will be five times greater than the dead pull of an engine. It is manifest that links are not broken by dead pull, but by jerks born of free slack. In the absence of free slack no such strain can occur so that a comparatively weak hook coupling without free slack will withstand the pulling strain.

The greatest trial to which the M. C. B. coupler is subjected is in switching and coupling. There is little danger of breaking in transit. When drilling in yards cars are punted or poled from lead tracks and crash against stationary cars with tremendous force. And again when coupling every new device is tested unofficially by switchmen who regardless of damage to equipment, will signal to the engineer, "Open her out Jim, and hit her hard, and see how this thing'll work."

A friction buffer manufactured by Westinghouse, is intended to take up a portion of this shock, but it has not been in use long enough to establish its utility. When a suitable buffer is found the expense of maintaining the M. C. B. coupler will be greatly reduced.

The recital of the action of the M. C. B. society leading up to the final conclusion and adoption of a standard type as well as the interest and action taken by the commissioners of the several states and other societies covering a period of years, demonstrates that the solving of this problem has brought into action the best skill of this country, men familiar with



the requirements and conscious of the need of reform from the dangers and expensive form of old style link and pin. Many men are still unconvinced that the proper type has yet been adopted by the M. C. B. but the majority believe in it, and the question now is how to put it into service. The transition period is a dangerous one. Will railway officials equip their freight cars as fast as renewals are needed or new cars built without the force of the law, and if legislation is necessary, shall it be state or national?

#### BLOCK SIGNALS.

If we have learned how to stop a train it is also very essential that we be advised when to stop.

During the year ending June 30, 1890, reports show 311 persons killed and 1,313 injured in collisions. Of this number 167 killed were employes and 107 passengers; 820 injured were employes and 445 passengers. This indicates that accidents from collisions present a more dangerous element to passengers than any other form and the traveling public is necessarily more interested in safety appliances tending to the safe handling of passenger trains than in any other safety appliance.

While the automatic air brake is a foremost factor of safety in the movement of trains it still fails to entirely overcome the errors of the train dispatcher, operator or trainmen. If the dispatcher's time spacing of trains was carried out as intended there would be but few collisions. However, so many chances present themselves in running that the schedule is not always maintained and it is necessary to change the time spacing for distance spacing in order to reduce the danger of collisions to the minimum.

In England the block system is in almost universal use, about 90 percent. of all the passenger trains of that country are worked by the absolute block system, and will doubtless be universal, as the board of trade under a recent act of parliament, has notified the companies that the use of this system will be *required* on all passenger lines.

The block system originated in England and grew out of the necessity of traffic. The original method was introduced about 1853. The plan then used was to divide the road into sections, whose length varied with the requirement of traffic or the profile of road and topographical features of the contiguous country, sections over which few trains travel being from two to five miles long. Where traffic was more dense sections did not exceed one mile. At the end of each section a tower or signal house is located, occupied day and night by a signalman who is also a telegraph operator, who was charged with the duty of keeping a vigilant look-out and wire the signalman in tower on either side when a train had passed his station. Two trains are not allowed between signal stations at the same time. Such universal use of the block system in England and the resultant safety from collisions is a powerful argument in its favor.

Some of the lines in the United States, realizing the importance of the block system, have introduced it on lines where traffic is heavy enough to warrant the expense. The original method is very expensive and unscientific, and great advancement has been made in England and the United States in the practice.

The protection of a train which for some reason has been compelled to stop between telegraphic stations is generally attempted by sending a man back along the track with a signal to warn approaching train. If the flagman who is sent back, as well as the engineman on following train, perform their duty, all is well. But extreme vigilance is necessary on the part of both, and if the weather be inclement or the signal be difficult to see on account of fog, collision is almost sure to follow.

It is true that much of the loss of life resulting from collision is due to negligence on the part of trainmen, and notwithstanding the carefully formulated rules provided for the guidance of trainmen, man is fallible and collisions do occur.

As early as 1841 one semaphore was in use at New Cross, England. Mr. Bourne, writing in 1839, says of the London and Birmingham: "Certain policemen are stationed at intervals along the line as signalmen, whose duty it is to remove obstructions, and to warn an approaching train of any obstacle to its progress. The signals made use of in the day time are small white and red flags, and at night, lamps similarly colored." But the policeman, with his flags and lanterns, could tell the engineman nothing till he came close to him, nor could he warn him that the train which had passed had not broken down between his station and the next. In order to guard against this the telegraph was called into aid, enabling the operators to communicate to each other announcing the passage of trains.

Various systems have been devised to operate the block signals automatically by the passage of trains, and the question of what is the best kind of block signaling and to what extent railroad companies will be willing to introduce what is certainly a great expense, is not yet determined.

The Sykes system is used to some extent in the United States, being the standard of the New York & Harlem R. R., the N. Y., N. H. & H. R. R., and the N. Y., L. E. & W. R. R. The Union Switch and Signal Company and the Hall Signal Company offer systems, each of great merit, differing greatly in method employed. The Union Switch and Signal Company provide two systems for the automatic block signals, one operated entirely by electricity and the other by combined rail circuit and compressed air. A gravity battery supplies the current which is carried through the rails, being connected at joints by wires connected to each end of the rail. The insulation between block sections is accomplished by placing a wooden washer between the angle bar and the rail. The sections may be of any length convenient to traffic to be controlled. At the termination of each section a semaphore signal with two blades is generally provided, the upper blade painted red, and when in horizontal position indicates danger, the lower painted green, being a signal to "proceed under caution." The lowering of the blade indicates that the danger which it indicated in horizontal position no longer exists. The normal position of all signals is horizontal. The unbroken current through the rails, through the mechanism of the machine on signal post maintains the signal at safety or inclined from the horizontal. When a train enters the block the current is taken up through the wheel and axle to the opposite rail. The current is broken and the upper blade moves to a horizontal position, indicating to following train that first block ahead is occupied. When the train leaves the first section, the current being again complete, the upper blade falls from horizontal position. The lower blade still remaining at "caution," horizontal indicating that train is in second section, train following proceed under caution. When train has passed into third section the first caution signal falls, and train following finding both signals down may proceed at full speed. The cessation or interruption of the currents, either by presence of train in block, broken rail, removal of rail by sectionmen, or from any of the various accidents which may arise to disturb the rails the signals are held at danger. The use of two blades is only practiced where blocks are short and it is desired to keep two clear sections between high speed trains. The use of this system of two blades on long sections would cause too much delay to traffic. The track circuit in perfect working order seems to cover all essential points in an automatic block system, and its use by the Pennsylvania R. R. at Pittsburgh and other points where traffic is dense seems to have given satisfaction.

The practice of sending flagmen back when train is delayed between stations should not be omitted, no matter what system of block signaling is used.

All signals used in the system just described are of the semaphore pattern, i. e., post and blade. This is the form generally adopted as standard for all form of block and switch signals.

The Hall system of block signaling differs materially from the Union Switch & Signal Co's. plan. In this system the wire circuit is used, and the signal instead of being of the semaphore pattern is of the disc pattern, inclosed in a case when indicating safety. The apparatus invented by T. S. Hall was first used on the New York and Harlem Railroads in 1871. This first device provided for the transmission of current by means of wires suspended on the telegraph poles and subjected to the usual danger of damage by storm, etc. The wire is now carried under ground to the signal posts. The device is rendered automatic by the aid of a track instrument which receives upon a lever the blows from passing wheels. Quoting from the description of their system found in their late catalogue: "The principle on which this signal is constructed and operated is that the first wheel entering a block section sets the signal at danger and at the same time breaks an electric circuit in such a way that under no possible contingency can the signal again show safety until the train passes out of the block section and operates the track instrument which restores the circuit. If a wire breaks or is grounded or two wires become crossed, the signal goes to danger. Likewise a failure of the battery or any failure of its parts, or the occurrence of any of the mishaps which experience has shown signal connections liable to, must always result in setting the signal at danger, etc."

This system it will be observed will allow a portion of a breakaway to pass out of a section setting the signal behind it, and leaving a portion of the train on track unprotected from following train. It also lacks the power of warning against broken rail or any disturbance of track which may be dangerous to traffic. It is claimed by those favoring wire circuit that it covers all the points claimed and that the breakaways should be protected by hand signal in hand of trainmen. I believe the Hall Signal Company favor the wire circuit on scientific principles and are prepared to furnish the rail circuit system if desired. The wire circuit is less expensive and it is contended that the cost of maintenance is less than by any system of rail circuits.

The station block system is in use on several railroads in this State, and where the stations are not too far apart the system seems to be satisfactory.

The U. S. & S. Co. are constructing a system of automatic block signaling for the C. B. & Q. out of Chicago. The general adoption of any system of block signaling in this State is considered too burdensome for the traffic, and it is only at points where the traffic is dense and accidents from collisions frequent that it will be used.

On the evening of September 19, a coal train on the Philadelphia and Reading broke in two. The train was made up of 150 cars, probably the short 4 wheeled cars in use on that road for local business. The break was about 100 cars from engine. Another train of same length was following ten minutes behind. Owing to lack of proper signals and negligence of trainmen the second section collided with the rear end of first train which had slackened speed after breaking away. The collision threw the cars over on to the second track in front of a passenger train, wrecking it and killing twenty-one and injuring thirty persons, five being employes. With air brakes, M. C. B. couplers this accident would have been in all probability averted, and with an absolute block system this accident could not occur.

The movement of trains at 12 minute intervals where traffic is dense, is not safe unless block systems are used.

#### SIGNALS.

The question of the adoption of a uniform code of signals has been the subject of much debate among men who are charged with the safe handling of persons and property.



The Time Convention, composed of general managers or officials of authority, have met from time to time and discussed the necessity of uniform train signals, have formulated a code of rules for general use, and in many ways promoted the general system of train signals.

Signals may be divided into classes as follows: The hand signal, train signals and semaphore or signals on fixed posts, indicating by position of arms, discs or globes, safety, caution or danger.

It is apparent that a uniform code for use of these signals is essential for safety. Trainmen change from one road to another, and unless all signals are used to express but one meaning on all roads there is liability to confusion and consequent danger.

The Time Convention has to a great extent succeeded in accomplishing this reform in hand signals.

The many combinations of fixed signals on trains necessary to indicate the class and position of train, make it necessary that trainmen be instructed alike, and I deem it necessary to good discipline that each trainman be provided with a book of rules showing a diagram of signals colored, showing position of signals on rear and of both passenger and freight by day and by night, locomotive running forward and running extra by day and by night. Locomotive running backward empty and running extra, locomotive running backward empty and carrying signals for following train, locomotive running forward carrying signals for train following, and locomotive running backward carrying signals for train following. Engine head light when on main track and siding-lights and flags should be shown in position on engine, tender or rear of train separately, under each of the conditions. Should also show by diagram color and position of all flags used as hand signals, also section men's signal, which is generally flag fixed to temporary post on enginemen's side of track. Car repairs signals should be included as well as the station order board, main track switch targets together with all other switch distant and semaphores whether fixed or movable. Also road crossing signs, station whistling posts, water tank highway crossings, whistling posts and public warning posts, slow order boards, yard limits and any other form of signal which the trainmen should understand. This handy volume will prove a means of education, and where tried has been gladly received by all trainmen.

#### INTERLOCKING, SIGNALING AND DERAILING.

The term interlocking as here used means the grouping of levers controlling the movements of switches, turnouts and signals, and so arranging them as to make it impossible for operator to give conflicting signals or routes. Signaling applies to the directing of traffic and derailling is used to prevent two trains colliding if for any reason the signal is passed when set against either of the trains.

The purpose of using this system of grouping levers under the control of an operator at a convenient point and arranging signals and derails to co-operate with same in their proper turn is: First, increased safety to life and property; second, increased facility in handling traffic at busy points and avoiding the necessity of stopping at grade crossings.

When we consider the many accidents which occur at crossings and the expense of stopping all trains before crossing at grade at the hundreds of grade crossings in this State, it will be easily understood that the matter of expense is the only item which deters railroad officials from equipping such crossings with an approved device which will be not only a feature of economy in operation of trains, but a factor of safety, speed and comfort to the traveling public. Sometime before the knowledge of its advantage was appreciated in the United States, England had perfected a machine which is now almost universally used there and is fast coming into service in the United States. As an evidence of its usefulness in England, Waterloo station, one of the busiest in England, is equipped with

an interlocking plant operated by 209 levers. From this tower the points and signals are moved to pass during seven hours of the day full 315 trains, and during the year 4,848,700 movements are made, or an average of 22 movements for each train. The Brighton signal box at London bridge is probably the largest in the world.

The first system of interlocking erected in this country was placed at East Newark, N. J., in 1874. This was an English machine known as the Saxby and Farmer type, a type which is now constructed by the U. S. & S. Co. and the Johnson Railroad Signal Company. Since 1874 the Union Switch and Signal Co. have erected up to January 1890, 551 interlocking machines, of which 52 are in Illinois. Of this number 6,046 are Saxby & Farmer levers, and since this report considerable work has been done. 19 machines have been erected in Illinois, comprising 277 levers, of which the Union S. & S. Co. built 18, working 266 levers, the Johnson S. & S. Co. putting in eleven levers. As the U. S. & S. Co. have been foremost in the construction of work in this State, I will give a brief description of the machine.

For a single crossing at grade six levers are generally used, two for moving four derail points located 300 feet each way from crossing, four levers operating four home signals, located 350 feet each way from crossing, and four distant signals operate 1,550 feet each way from crossing. The connection from derail to lever is generally made with pipe, and home and distant signals by wire. The levers are grouped in a tower and painted and numbered to correspond to movements they control, levers operating derails, black, home and distant signal levers half red and half green. The home signal is painted red on furthest face and has blade with square end. When in horizontal position it indicates danger, stop, the distant signal is a blade with fish tail and painted green on furthest face, and when in horizontal position indicates to engineer that he must proceed under control expecting to stop before reaching home signal. When blades incline from horizontal it is an indication that track is clear. Should an engineer disregard the signal to stop as indicated by home signal in horizontal position, and proceed toward crossing, he is derailed at open switch or "derail point," located 50 feet from home signal toward crossing. The operator in tower seeing a train approaching on number one track grasps the lever operating the derail points on that track and pulling it towards himself closes the points, giving continuous rail on number one, and through the mechanism of the machine moves a bar, locking the derail and signal levers on number two. The next movement is by moving the lever operating the signals on side from which train is approaching, the first half of the movement lowers the home signal and the final movement home lowers the distant signal also locks the signal lever operating signals on same track for traffic in opposite direction. The machine now has four levers in normal position locked, and two levers throw out from machine. The approaching train now has clear track and advance signals and is protected from collision with any train on track 2 by open derails and danger signals. The derail on number one which was closed cannot be opened until the distant signal, then the home signal, are moved to danger. The derail lever may then be put back home. All levers now stand in line, derails open and signals at danger. To guard against splitting of trains at facing point switches a thin iron bar, called a detector bar, 40 feet long is hinged to the outside of rail, moving in vertical plane. This bar is so hung that it cannot be moved lengthwise without at the same time being raised. This bar is long enough so that it cannot be raised between the trucks of a coach or car and is actuated by the first movement of the lever which controls the switch and unless track is free the detector bar cannot be lifted, consequently switch cannot be opened. All levers in a machine are pivoted upon a common center and each identical in construction and operation, the foundation being separate from tower. In front of the levers is a cast iron frame containing movable locking bars moving in horizontal position. A casting rectangular in form, called the "flop" is carried on bearings at each end under the locking bars. This "flop" is connected to a radial link by pivot block moving in link. During the movements of the lever the pivot block traveling in the radial link moves it verti-



cally, which through the universal joint turns the "flop" which, in turning strikes a "dog" or casting clamped to locking bar, drawing it sufficiently to lock all opposing levers and freeing the lever next in order to be moved.

The interlocking and signaling of most of the crossings and connections which have been put into operation in this State have been vastly more intricate than the simple crossing just described, but the method of construction and operation is only an enlargement of the plan, which must be conformed to.

The interlocking at Ash street, Chicago, operated by 54 levers: at Barrington, 13 levers: Clyburn Junction, 32 levers; Bridgeport, 36 levers, all of the Saxby & Farmer type, furnish examples of the complete manner in which every point is guarded and controlled.

The manual machine is the most generally used, but at points where the extent of system will warrant the expense the pneumatic machine is used. The finest example of this machine is at Pittsburgh, Pa. The power used is compressed air actuated by electricity, controlled by an operator who moves a small lever essentially the same as in manual machine, but requiring very little power.

The act which was approved in this State in 1887 providing for the passage of trains over grade crossings without stopping, when crossing is properly protected by interlocking and signals did not provide for the interlocking of draw bridges. I am satisfied that it is a matter of public safety and convenience, as well as a protection to railways to provide for the interlocking of draw bridges. Many draw bridges in this State are moved but seldom, and where they are moved often it is certainly better to protect the traffic against the possibility of engines running into an open draw. Records of such accidents, though infrequent, show disastrous results. The interlocking of the Bridgeport draw at Chicago with the complicated approaches thereto shows the complete manner in which this work can be performed.

#### FREIGHT CARS.

The record of accidents to employes falling from engines and cars during year ending shows that 2,504 persons were killed or injured. Of this number 493 were killed and 2,011 injured. While this fatality is chargeable to some extent to lack of proper brakes and couplers, which would do away with the necessity of men being on top of cars, it is also due to the improperly kept brake shafts, running boards, steps, side ladders, etc.

The Commissioners of the State of New York in their recommendations to the Legislature in their annual reports for years 1885, '86, and '87, ask that action be taken to compel railroads to protect trainmen from danger of slipping from the car roof by providing railing on roof along each side of car. No legislative action was taken. I am not advised that any State requires this protection to be provided.

During the meeting of the 13th annual convention of the M. C. B. society at Chicago in 1879, action was taken by the society fixing the standards for the kind and position of all brake shafts, fastenings for brake pawl, etc., position of running board at end of car, position and dimension of steps and ladders. These recommendations were adopted, and are as follows:

"That all brake shafts be placed on left hand corner of car, when a person is standing on the track facing the end of car. (Plates 6 and 7 show brake shaft in position as designated.)

"That the ratchet wheel and pawl be fastened to a suitable casting on the roof.

"That the running boards be not less than 18 inches wide and one inch thick, the ends of which to project 5 and one-half inches outside of the boarding. The projections to be supported by two braces of 2-inch by ¼-inch iron.

"That two good, substantial steps made of wrought iron, one-half inch by one and three-quarters inch be fastened, one to each side, at diagonal corners of the car.

"That each box and stock car have two ladders, not less than five steps in each ladder, made of five-eighths inch round iron, projecting three and one-half inches from siding, securely fastened to each end at diagonal corners with handle directly over the ladders on the roof."

The question of the proper form of dead blocks, and whether it is better to construct cars without end platforms has been a matter of considerable discussion. Car builders are about evenly divided in opinion as to the durability of platform in economic construction and its relation to the work of trainmen.

At the 20th annual convention of M. C. B., at Niagara Falls, in 1886, it was decided to test the matter upon a division by letter ballot and it was decided in 1887 that the standard dead block of the society would be as follows:

That when double dead blocks are used, that their vertical height and their width measured crosswise to the track, be each eight inches, that their thickness measured lengthwise be 6 inches; that they each consist of castings as represented by figures 22-24, Plate VIII.

That when a beam attached to the end sill is used for carrying the dead blocks that it be made 36 inches long, not less than 4 inches thick and 8 inches vertical depth. Plate VIII.

The parts pertaining to the equipment of a freight car which have been hereinabove described, together with brakes and couplers first mentioned comprise the principal features which have to do with the safety to trainmen, and it is necessary that these parts be kept in repair and be made to conform to the standard adopted by the principal railways of the United States through the action of their Master Car Builders.

A code of rules has been generally adopted governing the condition of, and repairs to freight cars for the interchange of traffic, which provides for the manner in which cars must be repaired and sent forward. When cars are received which will not pass a thorough inspection all repairs should look to uniformity, and if renewals are necessary, no parts but standard style should be put on.

Owing to the small percentage of cars being equipped with air brakes, the brakemen are compelled to be on cars when train is moving, and as it is a perilous business under the most favorable conditions of weather, when the weather is foul the danger to life is great, brakemen in the urgency of their call have not time to examine each step, ladder or hand-brake, and are often killed or mangled by the lack of proper attention of the car builder or inspector in allowing cars with defective equipment to be run in service.

My observation of the condition of freight cars in service convinces me that the inspection and repairs is not carefully performed.

The standards of the M. C. B. are generally good, and a rigid inspection by an officer of the Commission would prevent a great many of the accidents which occur from faulty repairs.

#### MAINTENANCE OF WAY.

Of all the many items which enter into the construction and maintenance of a perfect road I will not attempt to make mention. It is the first essential, both to passengers and employes in train service that the track—the channel of commerce—be perfect, and it is not only necessary that a Forth, East River or Eads bridge be built and maintained carefully, but that the little things insignificant in themselves receive equal attention. It was not the failure of an important structure which caused the fearful accident at Chatsworth nor a defective track or bridge which caused the Quincy disaster. It is only with the utmost vigilance and a

supply and use of proper materials that makes it possible for trains weighing four hundred tons and more, to attain the tremendous speed demanded by the public, and yet, carry nearly five hundred million passengers with safety to all but 2,456, and the evidence that it has been done is a high testimonial to the vigilance, care and skill of each of the 407,743 employees. Although this is a favorable report it is possible to make a still better showing by increased attention to details and by aid of improved appliances. Thanks to the skill of the American bridge engineer and builder, we have little to ask in the line of better bridges.

There has been no record kept of accidents from bridge failures, which leads me to suppose that the number from this cause is small. The construction and maintenance of pile and framed bent bridges and culverts is generally left to a bridge foreman who is generally unacquainted with strains in framed structures. The first building of these wooden structures of lesser importance as to dimension and cost, is comparatively well done, but the great cause of danger is in neglect to make proper repairs, clean away debris, weeds, etc., and general policing around the structures in dry season. One great cause of failure of small structures is insufficient water-way, causing floating drift to be lodged against the structures, damming up the water and causing displacement. Many framed bents rest upon mud sills placed two to three feet in ground which are very liable to be washed out by scouring in time of flood. Probably 75 per cent. in length of the bridges in this State are constructed of wood, and renewals on some of our strongest lines are being made of wood. It is unnecessary, I think, to reason why this is done. We know and admit that stone, iron or steel is better material of which to build. It then resolves itself into a question of first cost.

The rapid increase of weight in rolling stock has not been attended by the same advancement in bridges, excepting in new work. Structures which were built 10 or 15 years ago to sustain the traffic of that day yet remain with parts renewed, yet the general plan and dimensions of members remain the same. The result may prove disastrous, for it is difficult, nay impossible, to correctly judge of the character and minimum strength of any structure by superficial examination. As an example your attention is called to the failure of the west shore span of the Peoria & Pekin Union bridge, spanning the Illinois river at Peoria. On the evening of Feb. 3d, a train of the "Big Four" pulled by a consolidated engine and composed of gondola coal cars loaded, followed by grain cars, had reached the first river pier when the span suddenly fell, precipitating engine and tender to bottom and killing three men. The bridge was apparently in good condition and had been examined in December, 1889, by a bridge expert who found no apparent defect. The bridge was built for lighter traffic and besides the quality of iron and steel was found to be very poor. This accident caused other companies to be fearful of the safety of their bridges which had been built for some time and arrangements were at once made for renewals of some of the important structures.

It is not necessary to demonstrate by accident and death that any structure is weak. A careful examination, test of parts of material and calculation of strain sheets would develop weakness not otherwise apparent. Many of the railroads of this State have no complete record of the bridges on their line to show the kind, dimension and age. And I find no plans of any bridges, or any information concerning same in your office.

A very important safeguard to derail trains at bridge approach is the provision of some rerailing device. The Latimer device is used as standard on many lines in this State. It is manufactured in Chicago and has shown to be a successful device.

This subject is of such importance that the legislature of the State of New York enacted a law in 1887, providing that guard posts should be placed in the prolongation of the line of bridge trusses so that in case of derailment the post, and not the bridge truss, shall receive the blow of the derailed locomotive or car. In 1884 the railroad commission of the same state ordered drawings of all truss bridges, showing dimensions, floor



system, strain sheets, etc. This resulted in finding weak places in bridges. In many instances bridges were strengthened before strain sheets were sent in, showing the moral benefit of the law.

Many of the railroads of this State, owing in part to the meager earnings, and in part to an effort to pay interest on bonds and dividends on stock, starve the roadbed, and ties are permitted to remain long after they have served their full life. The average life of a first-class oak tie is seven years, making it necessary to renew 400 ties each year, or a total for main line in this State of 4,276,400 ties, while some of the best roads do make renewals at this rate, the total consumption will not reach more than one-third of this amount. The spiking is in many instances one-half or two-thirds done, this generally obtains where ties are poor, and poor ties coupled with half spiking gives results dangerous to traffic. Gauge, inspection of rails, elevating curves, joints, cattle guards, drainage, switches, frogs, crossings, etc., all need the most careful attention.

The question of accident to switchmen from being caught in frogs has called forth considerable discussion and some legislation in the different states. In Michigan, all railroads are compelled by law to fill all frogs so that the foot cannot be caught and held. This law was passed in 1880, and empowered the commissioner with the duty of prescribing the kind of filling to be used. The result seems to have proved satisfactory, for in 1885 but one accident occurred in that state from this cause, and in 1886 none occurred. The wisdom of the law seems to be vindicated by results.

That there is considerable danger from this source is evidenced by a letter written to the Hon. J. Hennessy, one of the commissioners of Missouri, by the switchmen and brakemen on the various St. Louis roads, in which they request that he assist them in securing them against the many fatal accidents caused by being trapped in frogs and between the guard rails and thus run down, the letter continues by saying, "We do not pretend to say that the companies are indifferent as to the safety of their employés, but we do know that no device is being generally used to keep the feet of the switchmen out of these dangerous gaps between the rails and the frogs. The blocks sometimes inserted in the frogs afford no protection whatever."

The lack of uniformity in the location of buildings, stand pipes, semaphore posts and platforms is a fruitful cause of accident to both passengers and trainmen. The high platform, while convenient in mounting to car steps, is often the cause of accident to persons, who for various reasons, unwisely attempt to board or leave a train while in motion. The height of platform at passenger stations should be level with top of rail, at two feet distance from rail, rising from thence toward building to allow for drainage. Movable step platforms should be provided and placed by porter or brakemen to assist passengers in boarding and leaving train. At freight station buildings platform may be raised to level of car floor. No building, pole or stand pipe should be placed nearer than seven feet from center of track. The practice of placing stand pipe between tracks having but 13 feet from center to center, should be condemned. A general order fixing the distance, would, I think, prove beneficial.

#### HIGHWAY CROSSINGS.

The placing of whistling posts to warn enginemen of proximity to a public road is generally performed according to law, and the enginemen as a rule use the whistle to warn travel of the approach of train. Notwithstanding these precautions many people are killed at highway crossings. Of the 13,754 persons killed or mangled during the past year from causes unassigned, a large percentage were caught at highway crossings.

This fatality is not by any reason all chargeable to lack of proper precaution on the part of railroad officials, for in addition to the warning by whistle and bell a proper warning sign is generally provided in plain view of traveler on highway. People becoming familiar with the danger do not exercise due caution in crossing the railroad track, and probably this fatality will continue until they are barred out of the track when train is passing. However, there are many points which may be improved by removing trees and bushes, which in many cases obstruct the vision of highway travelers, who, in winter time, with heads muffled by wraps to guard against exposure, cannot depend wholly on the sense of hearing to warn them of danger.

The construction of sub or super ways for highways is without doubt the proper way to prevent accident from this cause. The State of Massachusetts co-operating with the railroads of the State have provided for the expending of five million of dollars in constructing sub and super ways. Many dangerous crossings have been eliminated by the railroads working with the county commissioners in this State, and it is the expressed desire of many of our railroad managers to provide these safeguards where it is possible to do so at reasonable expense.

When it is understood among railroad officials that the State is keeping watch over the many details pertaining to the safety of track, bridges, etc., by careful inspection and supervision, there will be a marked improvement, and many existing features known to be dangerous will be eliminated.

#### HEATING PASSENGER CARS.

The first appliance for heating passenger trains in this country was the simple wood stove, providing no protection to passengers in case of overturning, mashing and consequent burning in case fire was in use at the time, resulting in death or injury by burning. For some years the public submitted to this dangerous element, considering it a necessary evil. The wood stove was gradually replaced by a so-called safety stove, claimed to be perfectly safe, even though the car containing it was destroyed. The repetition of horrible deaths by burning, charged to the presence of the car stove, were chronicled in the newspapers from time to time, until in 1887 "the deadly car stove" was voiced against by travelers. The appalling horrors added to the Ashtabula disaster by the burning of living men, women and children, and their cries echoed through the press, seemed to arouse the public to take some action to provide against the recurrence of similar disasters. The winter of 1886 and 1887 brought a series of disasters. The Rio disaster on the St. Paul road in October, 1886, when 17 persons were burned to death: the Republic wreck, January 4, 1887, when 13 were held beneath timbers and slowly burned to death before friends helpless to assist and avert their agony, and the killing and burning of 30 more at White River, Vermont, added to already excited feelings against the car stove, seemed to indicate that the time had come when decided action must be taken to find a substitute. At that time the heating of cars by steam from the locomotives was in an experimental state, being little used except upon the elevated road in New York City. Public opinion, inflamed by the "Spytten Duyvil" disaster, was so strong against the use of the ordinary car stove used in Massachusetts that the legislature of that State enacted a law in 1882 providing that all cars owned or regularly used on any railroad in the State, and furnished with heating apparatus, are to be provided with such safeguards against fire as may be approved by the commissioners. And again in 1887 provided "that in no event shall a



common stove be allowed in any such car." New York took similar action, providing "that after May 1, 1888, all railroads doing business in that State must not heat their passenger cars or other than mixed trains by any stove or furnace, etc." The use of the present stove was allowed where cars were standing on sidings, etc. This did not restrict the use of the cooking stove.

The heating of cars by steam from locomotive is now an accomplished fact in the State of New York.

Michigan, in 1887, provided that on and after Nov. 1, 1888, that railroad companies must make effective provision against the burning of cars in which passengers are carried. The commissioners of Connecticut were authorized after Sept. 30, 1887, to order any system of heating which they deemed proper. But after trial and examination of the various systems offered do not in their report of 1889 recommend any system of steam heating, but are so far convinced that some system of continuous heating will be perfected that in a circular dated July 10, 1889, to officials of railroads operating in that State, they say "we recommend that you do not equip or purchase any cars equipped with any system of heating which cannot be readily adapted to the use of steam or hot air. We believe that some system of continuous heating will soon be perfected which can be prudently and safely adopted \* \* \* \*. Further experiment should be encouraged for the purpose of developing some system of train heating which will give a uniform temperature throughout the cars of our longest passenger trains, attended by the fewest possible elements of danger from fire, or from the explosion of steam in case of accident, collision or overturning of cars." Notwithstanding the commissioners' lack of faith in the success of any system of continuous steam heating, as now perfected, the most prominent railroads of their State have sufficient confidence to warrant them in equipping their passenger cars for steam heating, thus demonstrating their faith both in the economy and safety of its use.

The subject of safely heating was taken up by the railroad companies through their master car builders some time before the matter was made a subject of State legislation. The president of the M. C. B. in his annual address to the society convened June 12, 1883, said: "The present manner of warming passenger cars during extreme cold weather in our northern states is far from satisfactory. How to furnish heat without injury to passengers from fire, steam or hot water in case of accident is one of the problems yet to be solved; and as inventors have not as yet presented a device removing such liabilities, it is incumbent on all master car builders to study carefully how to arrange the available heaters to obtain the best results as to comfort and safety," and their committee in their report of same year say that "steam in all cases is preferable for heating cars \* \* \* In case of derailment or collision, safety demands the heater to be placed outside of the cars."

During the winter of 1887-'88 tests were made of the various systems of continuous heating. The result shows that 18 different systems were on trial, comprising straight steam, indirect radiation, hot water, water and Baker heater pipes, steam and water circulation. Thirty-three railroads using the systems, represented by the 18 companies, report but two failures to give satisfaction, and the general result was very satisfactory. At the close of year 1888 the Martin system was in use on 141 locomotives and 416 cars, the Sewall on 205 locomotives and 295 cars, the McElroy on 90 locomotives and 120 cars; N. Y., L. E. & W. Ry., 102 locomotives and 336 cars; L. V. R. R. system, 50 locomotives and 50 cars; N. Y. Safety C. H. and L. Co., 44 locomotives and 93 cars; C., M. & St. P. Ry. system, 37 locomotives and 76 cars; B., C. & Nor. Ry. system, 28 locomotives and 65 cars; Emerson, 26 locomotives and 41 cars; Gold system, 20 locomotives and 6 cars; Standard C. H. & Vent Co., 3 locomotives and 16 cars; Penn. R. R. system, 1 locomotive and 6 cars; N. W. M. C. Heating and L. Co., 3 locomotives and 3 cars, and Erie Car Heating Co., 1 locomotive and 4 cars.

Many railroad companies have adopted steam heating systems of their own.

Many difficulties have developed themselves since the question of continuous heating was first discussed. The heating of cars while detached from engine, condensation, probable effect on steaming of locomotive, couplings, etc., have been considered, and the objections are to a great extent overcome. In all cases the necessary heat for cars where detached from locomotive is obtained by starting fire in stoves, which must be extinguished before car leaves station in train.

The fullest information concerning the general use of steam heat is very difficult to obtain, some roads using several different systems. The B. & O. uses 3 different systems, with a total of 107 cars equipped. The N. Y., L. E. & W. uses 5 systems on 572 cars, of which number 529 are heated by direct steam on a plan of their own devising. On 12 roads east of Chicago 1,955 cars are equipped with 15 different systems, and on none of these roads has there been shown to be any effect on locomotive by reason of drawing steam from it.

The coupler is not so serious a question as many will argue. While there are many devices for steam coupling, such as the Erie, a metallic, the Martin, Sewall, Gibbs and others, a type may be agreed upon by the railroad companies if the equipping of cars is made compulsory.

Plate IX. shows application of the system offered by the Safety Car Heating and Lighting Co.

In order to use the Baker heater and its water circulating pipes, with which most of the first-class roads have equipped their cars, it was found that a system of indirect steam would meet the requirements best and at the least cost. In this system the steam is conveyed from locomotives to steam jackets, which surround the pipe, as shown in diagram. In this system the steam in jacket and salt water in pipes do not come in contact, and the heat being applied at three points, the circulation is kept up and the water heated faster than if Baker heater was used. When car is detached from train a fire may be kept up in Baker heater, without in any way interfering with steam heating system. The condensation of steam is discharged through a trap.

Five railroads centering in Chicago use this system, which is used to some extent on 18 railroads, and by the Pullman and Wagner Sleeping Car Companies.

The Consolidated Car Heating Co. offer three ways of supplying continuous steam heat. The first system, called the McElroy commingler system, is illustrated in Plate X. This is also used with the Baker heater, but instead of heating water indirectly, steam is introduced into the water of the pipes through a device called a commingler, shown in right hand corner of Plate X. To prevent the disagreeable clacking noise noticeable where steam and water occupy same pipe, the vessel is filled with gravel. The heated water and steam run to the expansion drum, and passing round car returns through Baker heater to commingler to be again heated. This system seems to present many favorable features, and is the outgrowth of the Westinghouse and McElroy systems. Fire is applied to water coil in Baker heater when locomotive is not attached. Pipes may be emptied after car is through service, and steam may be blown through when car is wanted for service. The condensation will fill pipes; at the same time the car will be quickly warmed by radiation from live steam. This system may be used for direct steam or water circulation.

The Sewall drum system, as illustrated on Plate XI., is an example of indirect steam heating, using Baker heater and pipe circulation. The steam is admitted into the drum, shown in right hand corner of Plate XI. Through this drum is passed a coil of pipe connected with Baker heater. The steam surrounds this pipe, and heating the water starts the circulation through expansion drum, and from thence through pipes and back to drum.

The Gold Car Heating Company have equipped nearly 3,000 locomotives and cars, their system being used as standard on many railroads, while they use a system with a Baker heater as auxiliary. The plan they think best is illustrated in Plate XII. In the Storage Heat System, "four stor-

age heaters are used. Each heater is supplied with steam from the main supply pipe, to which it is connected near the end of the car." The heat is stored by a water cylinder hermetically sealed, owing to the large radiating surface in storage cylinders the temperature in the car is raised very quickly after steam is turned on. This system depends for its heat when detached from locomotive upon the heat stored in fluid contained in cylinders. While there is but little danger to passengers from scalding, should a car be wrecked and pipe broken, the steam vaporizing, when coming in contact with the air, will fill the car, obstruct the vision and frighten the occupants. To guard against the possibility of such an event, J. R. Droziski, of the Erie Car Heating Company, has invented an automatic steam shut-off, a diagram of which will be found on Plate XIII. The machine is placed upon the locomotive in the engineer's cab in a convenient place where it may be connected with the steam and air pipes and requires no additional attachment on cars. When it is necessary to use steam before air is pumped, the engineman grasps the handle, pressing the catch lever marked C, operating a lever B inside of handle A. When the handle A is released the lever B keeps the rubber gasket D one-sixteenth of an inch from seat. The gate is now open in main steam pipe. The automatic feature of this machine is accomplished by the use of air taken from the main air pipe and conducted to cylinder F. As soon as the pressure is let into cylinder F, the piston is forced up against seat E, at the same time releasing lever B, which returns to its normal position in handle. While the air pressure is on, the gate in main steam pipe is open. If for any reason the train is parted and air is broken, the gate in steam pipe is instantly closed by force of spring H.

"Steam," "hot water," "hot air" and electricity have been experimented with for the production of heat, practical results seem to favor indirect steam heating in connection with Baker heater, or storage heaters, direct steam with or without Baker heater, and the commingling of steam and water, in connection with the Baker heater and piping.

#### LIGHTING PASSENGER CARS.

The danger to life and property in the presence of the oil lamp generally used for lighting passenger trains, is not as great as many people believe. The oil being refined to such a degree as to prevent igniting while in a body. However, should one of these reservoirs containing oil be broken and the contents scattered over the cushions, carpet and wood-work of the car it then presents its best condition for combustion. While accidents resulting in death from this cause are rare, the expense of maintenance of oil lamps, as well as the desire to provide an attractive and efficient light which would be free from the dangerous qualities and general imperfections of the oil lamp has caused investigation to be made looking to improvement in the system of lighting passenger cars.

The use of common gas has not proven satisfactory, as under compression necessary to store a sufficient quantity for supply on a trip the gas losses too much of its illuminating power. The use of a refined gas in Germany attracted attention in the United States, and the results obtained from it seemed to warrant its introduction on our railroads. This system known as the Pintsch system has since been introduced on many of our railroads. The patentee, Mr. Julius Pintsch, perfected his plans in Germany during the year 1870. The gas used for this light is manufactured from crude petroleum, or the residual products of coal oil distillation. The gas is manufactured at terminal points and stored in powerful cylinders from which it is piped between the tracks, with convenient cocks at intervals from which a supply is drawn into the receiving cylinder, fixed under the body of the car. This cylinder is of iron, capable of sustaining a pressure of 250 pounds per square inch, and is charged to 150 pounds. The capacity of cylinder or tank is about 185 cubic feet. A pressure of 150 pounds would be many times too great to use at the burner, a regu-



lator is used which provides the gas at the burner at a pressure sufficient to produce a steady, mellow flame, and is so nicely adjusted as to furnish just enough, whether the flame is desired full or low.

The lamps are generally furnished with four burners inclosed in a glass globe which perfectly shields the flames from disturbing currents of air. A glass reflector is placed above the burners which distributes the flame and adds brilliancy to the illumination.

I have no record of any accident involving loss of life or injury to passengers through the use of this system, and it appears that the dangers incident to the presence of gas of any kind, stored on car which is liable to be set on fire from many causes, has been brought to a minimum. The only opportunity for adding to the danger of burning wreck, would be from the escape of gas from broken pipe. The pressure of gas in tank is so great that if the shell should be perforated the force of gas escaping would extinguish any flame that would be likely to reach the aperture. The explosion of tank is guarded against in its construction, the joints being made in such manner as to release the gas before pressure is raised to limit of resistance of shell.

This system has been in use 20 years, and since its introduction to the United States has been greatly improved. The system claims to furnish a better, safer and cheaper light than can possibly be furnished by oil lamps.

January 1st, 1890, this system was in use upon 33,500 passenger cars in Europe, United States, South America and Australia. Plate XIV shows the location of tank, regulator, pipes, lamps, etc., on a passenger car.

The Frost Dry Carburetter system which has been introduced on many of the trunk lines of the United States and made the standard on some lines, has equipped 633 passenger cars on lines east of Chicago. The gas for the light in the Carburetter system is manufactured at the lamp, or rather in Carburetter near lamp, by the forcing of air through a metal spiral filled with cotton wicking saturated with refined gasoline. The air is supplied from cylinder under car used as a reservoir, being supplied with air under compression from the main brake pipe. The gas is simply air carrying a certain amount of gasoline vapor. In this system there is no need for gas plants, as its carburetter with its air connection, is a gas generator.

The Carburetters are charged from top of cars, with only so much gasoline as the cotton wicking will absorb. The mechanism is so arranged as to prevent overcharging, and consequent presence of free oil.

Plate XV shows the Carburetter system as applied to passenger cars.

In order to determine if the pressure of gasoline absorbed in cotton wicking as held in carburetter would prove an element of danger in case of car being wrecked, trial tests were made at Altoona in June of this year.

It has been claimed by the rival system and some technical journals that a carburetter might be ruptured and a car flooded with volatile and inflammable gasoline; or that in case of fire the rapid vaporization of the gasoline in the carburetter would cause explosion. The tests at Altoona did not show these elements of danger.

A perfect light for passenger cars should meet the following requirements:

1. It should be safe.
2. It should ventilate the car perfectly.
3. It should furnish mellow and effective light to all parts of the car.
4. It should be simple in construction and operation.
5. It should be constructed, operated and maintained at minimum cost.

I think either of the systems described offer safety, better and more economical light than can possibly be furnished by oil lamps.

## CONCLUSIONS.

1. That automatic train brakes should be provided on all cars and locomotive engines. With this provision, accidents from exposure, falling from train, overhead obstructions, etc., would be reduced to a minimum, and overhead crossings could be built at much less expense.

2. That the Master Car Builders' type of automatic car coupler is the best type in the market. That its universal use in connection with train brakes will prevent great loss of life.

3. That the absolute block system should be used on lines where traffic is dense.

4. That a code of uniform signals should be adopted, in which form and position governs by day and night.

5. That all railroad crossings at grades which may hereafter be constructed should be protected by a system of interlocking and signals. That a portion of existing railroad grade crossings should be protected in like manner each year until all are so protected.

6. That all freight cars be carefully inspected to provide against the damages to trainmen from defective parts.

7. That the Railroad and Warehouse Commission be furnished with complete statistics bearing on the physical condition of each railroad in the State. That each railroad in this State should furnish the Railroad and Warehouse Commission a certified copy of plan of each bridge exceeding a span of sixteen feet.

That the standard plans for minor structures be also furnished.

That a copy of the general rules governing the train and track force be also furnished.

That a careful inspection be made of each railroad in this State at least once each year.

8. That, where practicable, the grade of railroad and highway crossings be separated. That it is possible to remove many obstructions to vision at grade crossings at small expense.

9. That the heating of passenger cars by steam from the locomotive is practicable.

10. That the kerosene oil lamp should be superseded by a system of lighting which will reduce the danger of accident by burning.

## ADDENDA.

In concluding my report upon the use of safety appliances in the operation of railroads, and summing up the results obtainable when the best appliance of its kind is put in service, the question naturally arises as to what is the best method of securing the results aimed at.

Opinions have been expressed by the Railroad Commissioners of some of the States, and the report of the Inter-State Commerce Commission for 1889 contains an exhaustive review on this subject of State and federal legislation. While the solution of the proper method will probably be arrived at through persons conversant with questions of legislation, there are certain mechanical and engineering features pertaining to the subject of which one unfamiliar with the subject may not be advised.

The business of conducting the railroad traffic in this State, if the extent of operated roads was limited by the boundary of the State would be comparatively simple. The business is not, however, confined to the limit of State control or the boundaries of the United States; it is international. Changes from established methods should be well considered before recommended, as the expense is an item which cannot be overlooked. Railway managers who have won position by faithful and intelligent labor, guarding alike the interests of the public and the property in their charge,



wisely hesitate to adopt new methods which have not been thoroughly tested by practice. Yet these same men, mindful of the welfare of those intrusted to their supervision and care, with the clear insight into the multifarious necessities of the safe and successful conduct of the business in their charge, are the first to acknowledge the necessity of guarding every point of danger. The necessity of improvement in the many devices of which my report treats, is evident to them, but without the co-operation of the directory the managers are powerless to move in the matter.

Uniformity must be the aim of any movement toward success. There is no question but what we have in the market a continuous air brake and car coupler which, if used in all traffic, will reduce the frightful fatalities and be an investment well made: but this cannot be controlled by independent State legislation.

I believe the result may be obtained by national legislation requiring the equipment of all new passenger and freight cars with an interchangeable form of automatic train brake and automatic close couplers, and when renewals are made all such renewals should be made in accordance with the standard adopted. The provisions of such an act should include any protection which is necessary in interstate business. Such an act needs no new officers to carry out its provisions. The several State commissioners should be charged with the duty of inspecting thoroughly the equipment of the several railroads within their respective States. Of such features of the railroad which are entirely within the State, I would respectfully call your attention to the necessary improvements indicated in my report of Maintenance of Way. The inspection of bridges, location of buildings, platforms, filling of frogs and guard rails and the protection of life at highway crossings, as well as the further extension of control of the interlocking and signaling. No provision is made for the inspection of interlocking plants after they have been accepted by your Commission and put into operation. Derails may be spiked, detector bars or other important parts of a plant may be removed, the system changed to admit of dangerous elements, and no knowledge of such change be in the hands of the commission. Inspection of these complicated plants should be made at regular intervals. I do not believe that changes would be authorized by any company through its superior officers without first consulting your Commission, but that changes are made is a fact, being of so frequent occurrence in Michigan that a special inspector has been appointed charged with the duty of looking after all subjects pertaining to the physical and mechanical operation of the railroads of that State.

So much material of interest is presented to me in making this report that volumes could be written. I trust that I have embodied in this report such features of safety appliances in the operation of railroads as will be of general information.

Respectfully submitted,

CHAS. HANSEL,

*Consulting Engineer.*

## PLATE. I.

*Railroad accidents for year ending June 30, 1889.*

## COMPARATIVE STATEMENT UNITED STATES AND ILLINOIS.

| KINDS OF ACCIDENT.                   | UNITED STATES. |          |             |          |                |          |                      |          |                 |          |
|--------------------------------------|----------------|----------|-------------|----------|----------------|----------|----------------------|----------|-----------------|----------|
|                                      | Employés.      |          | Passengers. |          | Other persons. |          | Total United States. |          | Total Illinois. |          |
|                                      | Killed.        | Injured. | Killed.     | Injured. | Killed.        | Injured. | Killed.              | Injured. | Killed.         | Injured. |
| Coupling and uncoupling cars.....    | 300            | 6,757    | .....       | .....    | .....          | .....    | 300                  | 6,757    | 21              | 444      |
| Falling from trains and engines..... | 493            | 2,011    | .....       | .....    | .....          | .....    | 493                  | 2,011    | .....           | .....    |
| Overhead obstructions.....           | 65             | 296      | .....       | .....    | .....          | .....    | 65                   | 296      | .....           | .....    |
| Collisions.....                      | 167            | 820      | 107         | 445      | 37             | 48       | 311                  | 1,313    | 21              | 63       |
| Derailements.....                    | 125            | 655      | 28          | 389      | 59             | 69       | 182                  | 1,113    | 7               | 30       |
| Other train accidents.....           | 189            | 1,016    | 26          | 247      | 522            | 515      | 737                  | 1,778    | .....           | .....    |
| At highway crossings.....            | 24             | 45       | 3           | 16       | 410            | 634      | 437                  | 695      | 35              | 64       |
| At stations.....                     | 70             | 699      | 26          | 295      | 328            | 472      | 424                  | 1,466    | .....           | .....    |
| Other causes.....                    | 539            | 7,729    | 120         | 754      | 2,215          | 2,397    | 2,874                | 10,880   | 473             | 1,105    |
| Total for United States.....         | 1,972          | 26,028   | 310         | 2,146    | 3,541          | 4,135    | 5,823                | 26,309   | .....           | .....    |
| Total for Illinois.....              | 172            | 1,188    | 25          | 116      | 360            | 402      | .....                | .....    | 557             | 1,706    |

# ESTLINGHOUSE AUTOMATIC BE

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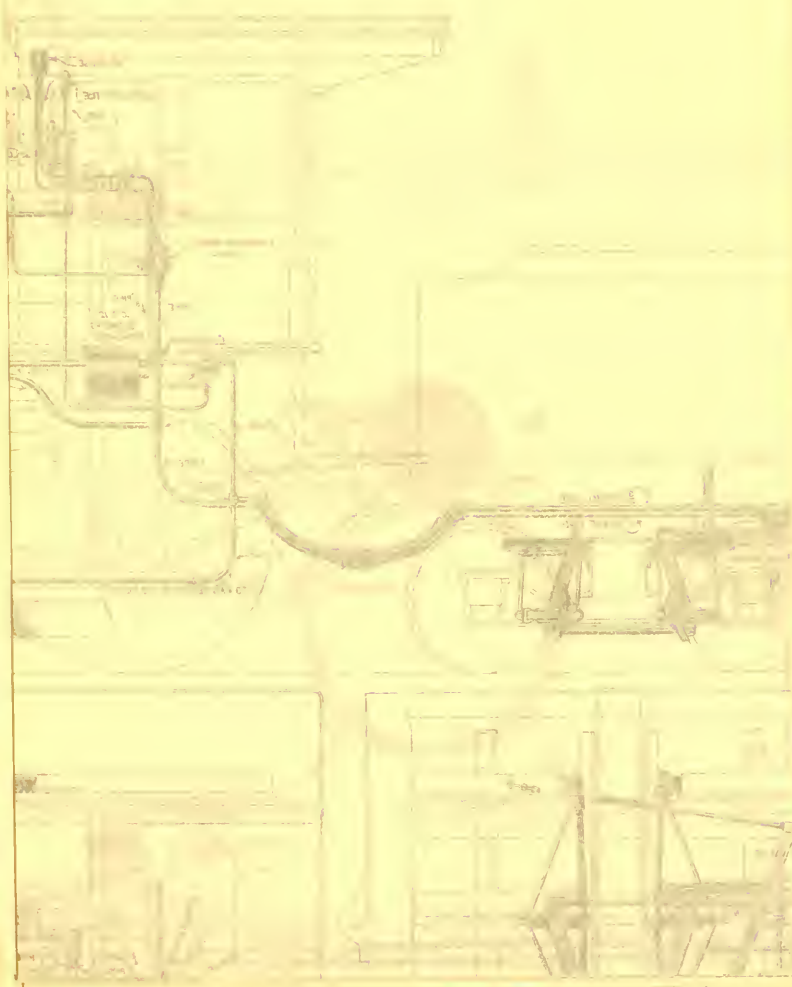
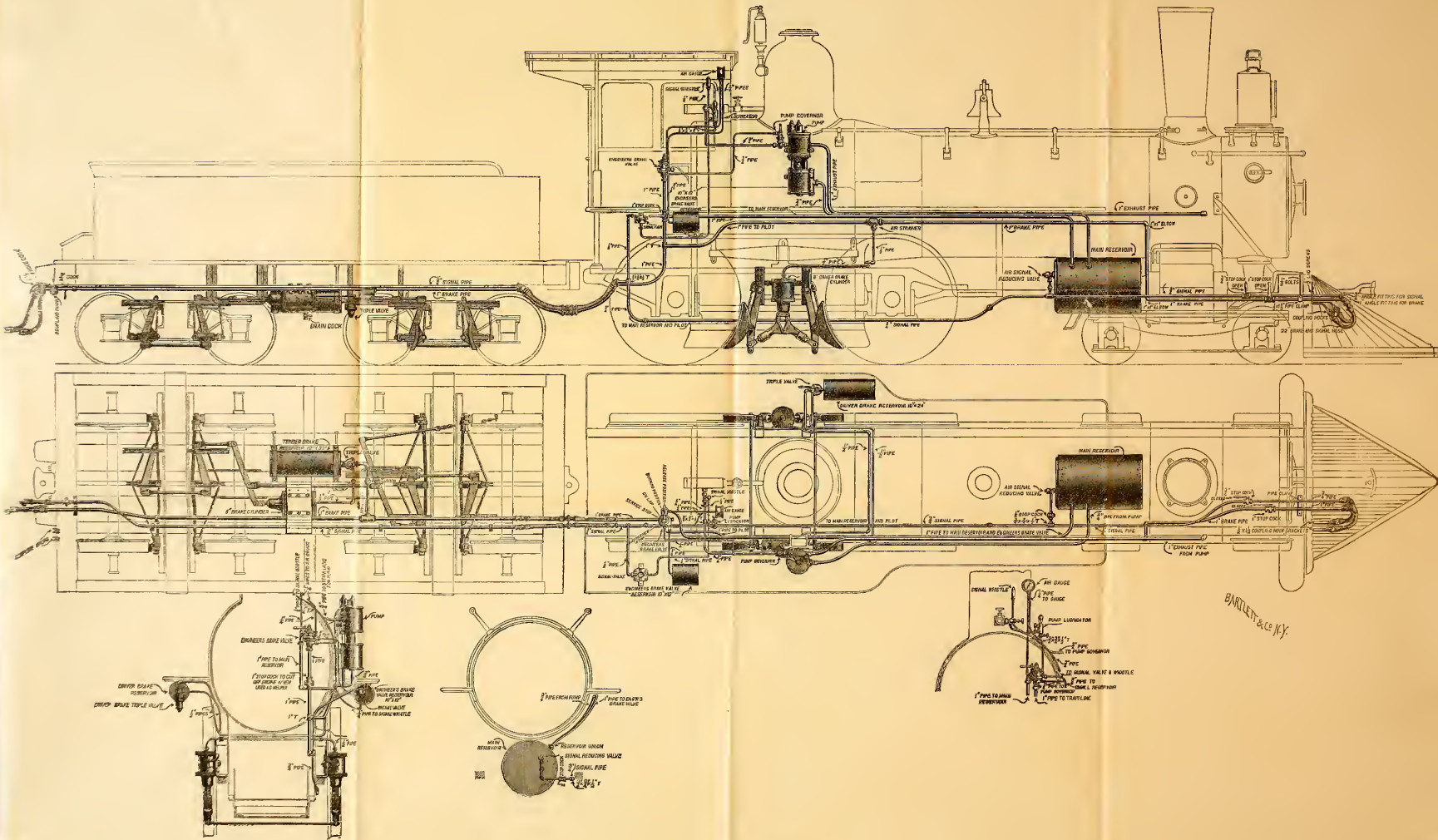


PLATE I.  
*Railroad accidents for year ending June 30, 1889.*  
 COMPARATIVE STATEMENT UNITED STATES AND ILLINOIS.

| KINDS OF ACCIDENT.                   | UNITED STATES. |          |             |          |                |          |                      |          |                 |          |
|--------------------------------------|----------------|----------|-------------|----------|----------------|----------|----------------------|----------|-----------------|----------|
|                                      | Employés.      |          | Passengers. |          | Other persons. |          | Total United States. |          | Total Illinois. |          |
|                                      | Killed.        | Injured. | Killed.     | Injured. | Killed.        | Injured. | Killed.              | Injured. | Killed.         | Injured. |
| Coupling and uncoupling cars.....    | 300            | 6,757    | .....       | .....    | .....          | .....    | 300                  | 6,757    | 21              | 444      |
| Falling from trains and engines..... | 493            | 2,011    | .....       | .....    | .....          | .....    | 493                  | 2,011    | .....           | .....    |
| Overhead obstructions.....           | 65             | 296      | .....       | .....    | .....          | .....    | 65                   | 296      | .....           | .....    |
| Collisions.....                      | 167            | 820      | 107         | 445      | 37             | 48       | 311                  | 1,313    | 21              | 63       |
| Derailments.....                     | 125            | 655      | 28          | 389      | 29             | 69       | 182                  | 1,113    | 7               | 30       |
| Other train accidents.....           | 189            | 1,016    | 26          | 217      | 522            | 515      | 737                  | 1,778    | .....           | .....    |
| At highway crossings.....            | 24             | 45       | 3           | 16       | 410            | 634      | 437                  | 695      | 35              | 64       |
| At stations.....                     | 70             | 699      | 26          | 295      | 328            | 472      | 424                  | 1,406    | .....           | .....    |
| Other causes.....                    | 539            | 7,729    | 120         | 754      | 2,215          | 2,397    | 2,874                | 10,880   | 473             | 1,105    |
| Total for United States.....         | 1,972          | 20,028   | 310         | 2,146    | 3,541          | 4,135    | 5,823                | 26,309   | .....           | .....    |
| Total for Illinois.....              | 172            | 1,188    | 25          | 116      | 360            | 402      | .....                | .....    | 557             | 1,706    |

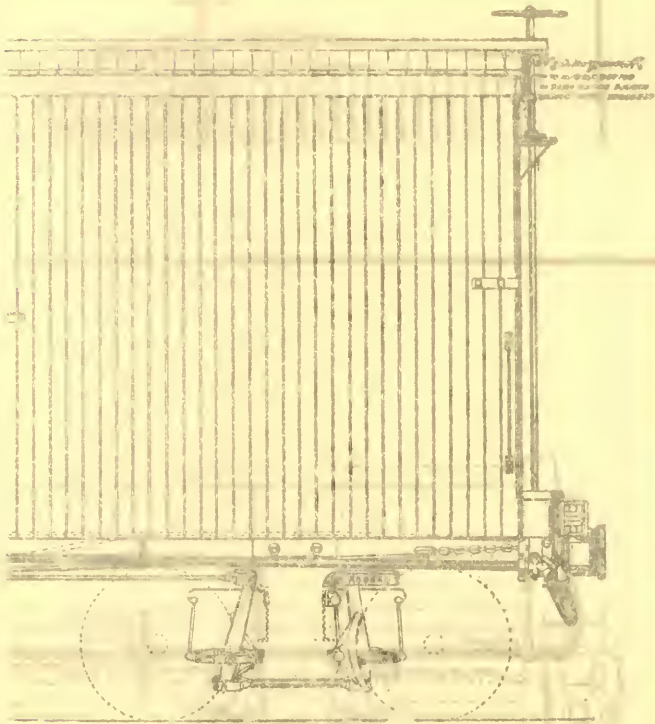
# THE WESTINGHOUSE AUTOMATIC BRAKE AS APPLIED TO A LOCOMOTIVE.

PLATE II.





## PLATE III

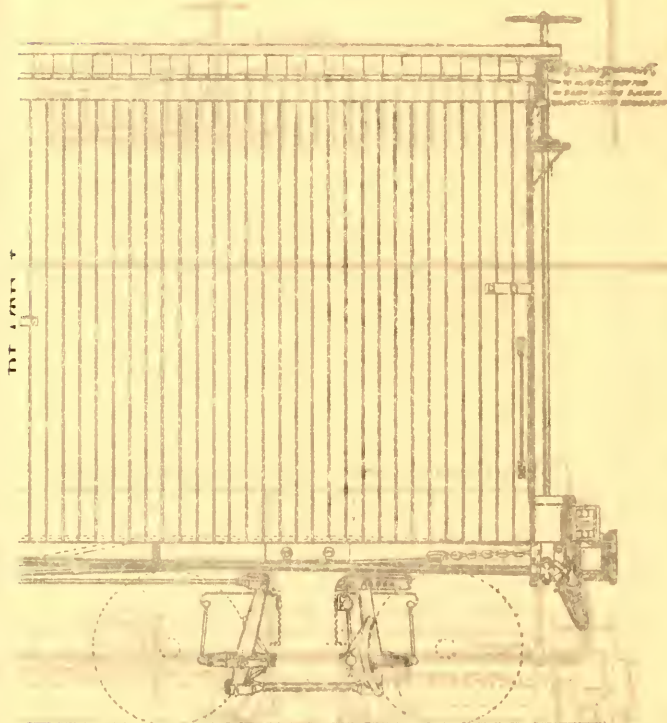


These are the various parts of the machine, and the manner in which they are connected together. The drawing is intended to show the general arrangement of the machine, and the relative positions of the various parts. It is not intended to show the details of the construction, or the manner in which the machine is operated.

Col  
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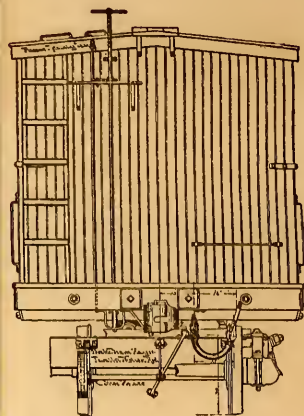
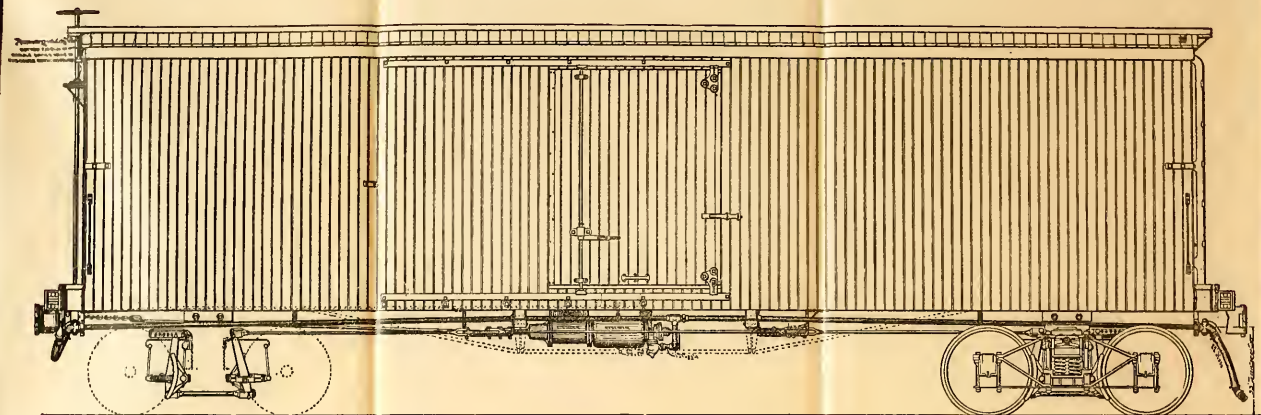


## PLATE III

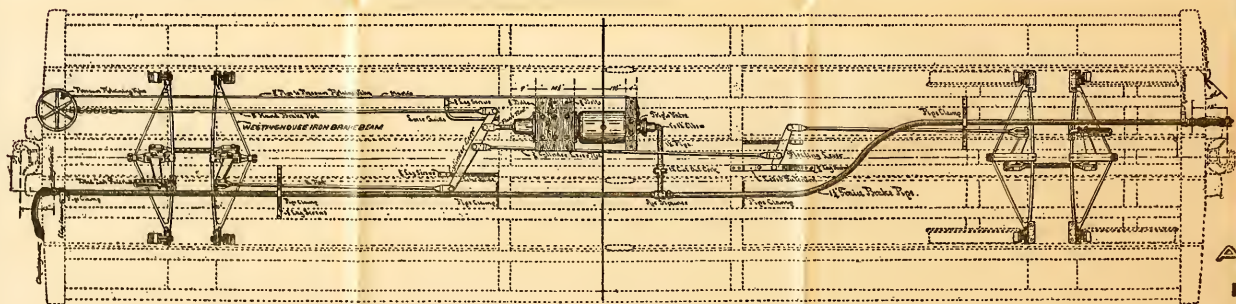


The engine is shown in a side view, with the piston and connecting rod visible. The drawing is labeled 'PLATE III' and 'DT 1000'.

PLATE III.



The relative angle of hoses should, must be maintained when attaching brake rigging to cars.  
 Pipes to be bent where practicable, and bent out with straps after bending.  
 All connections to be perfectly tight, air tested under pressure with soap suds.  
 All pipes to be securely fastened to car timbers to prevent shaking and loosening of joints.  
 Use cottered, spading at joints, and put in outside of pipe flange - screws into filling.  
 If air works on inside of flange, it is to be put into Tight Valve and tighten with wedges of bolts.



THE  
 WESTINGHOUSE  
 QUICK ACTION  
 AUTOMATIC BRAKE  
 FREIGHT EQUIPMENT CARS

17 1861

17 1861

Col  
Fal  
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PLATE IV.

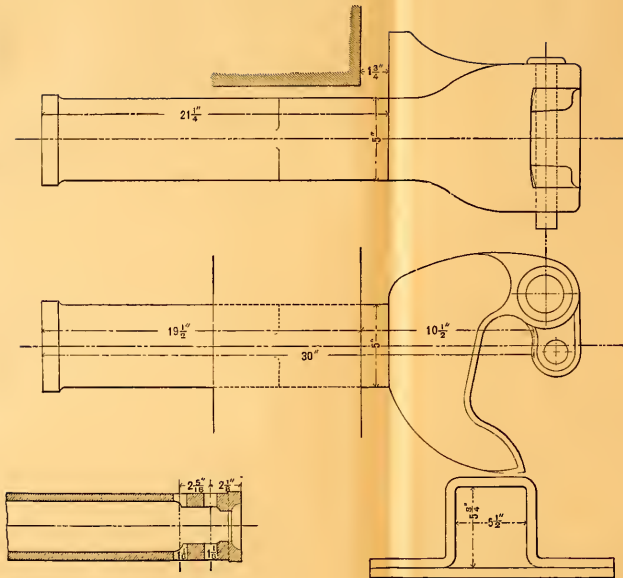
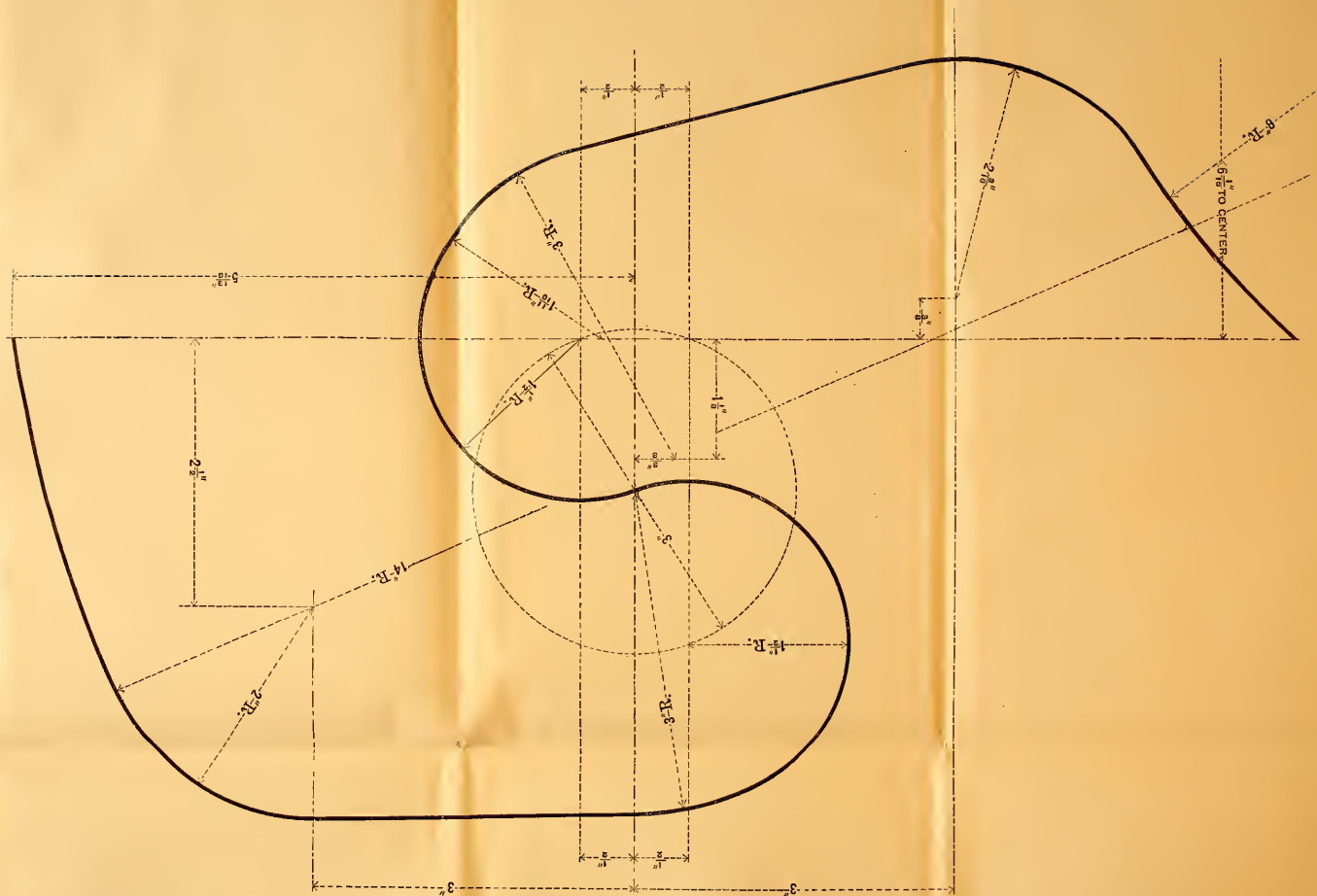


PLATE V.





# PLATE VI.

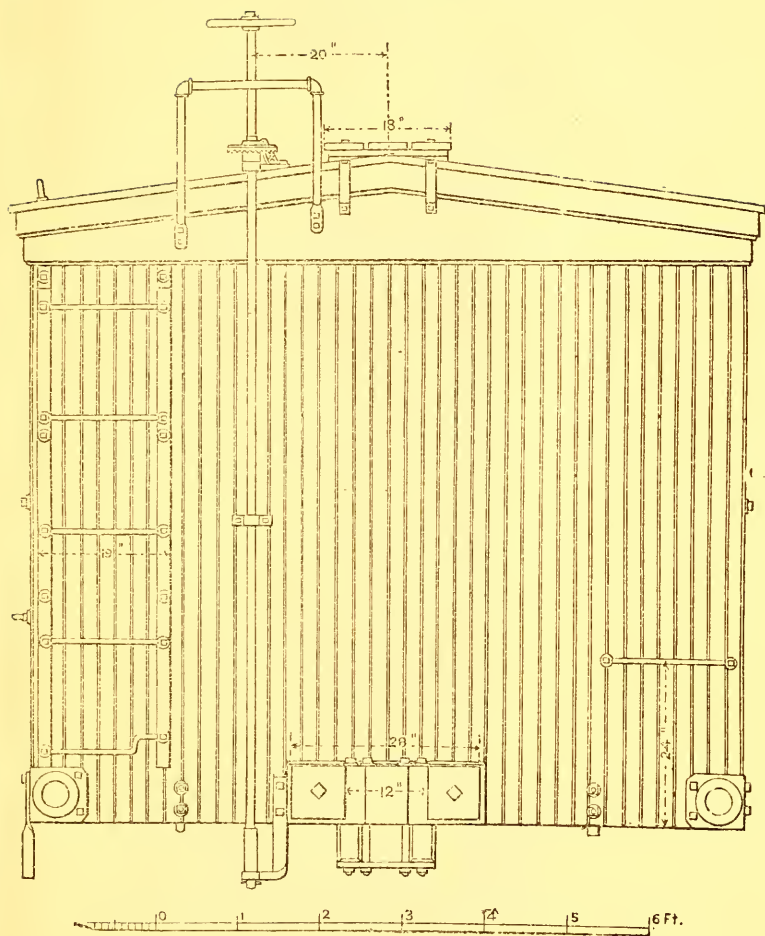
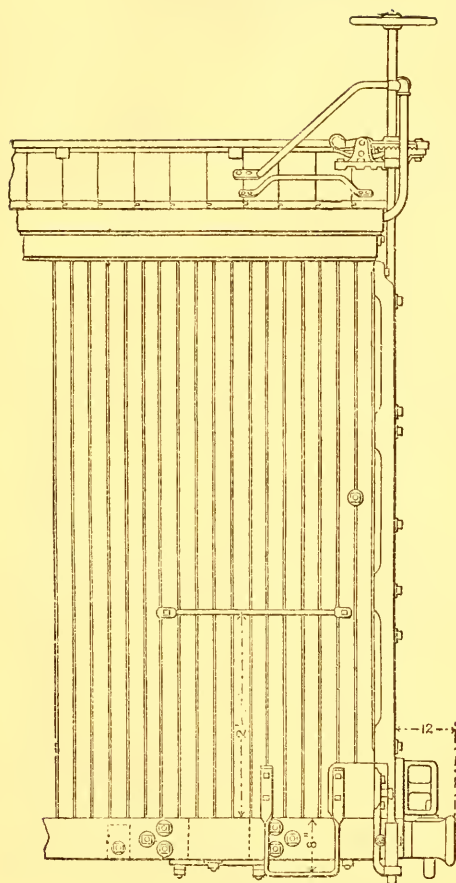


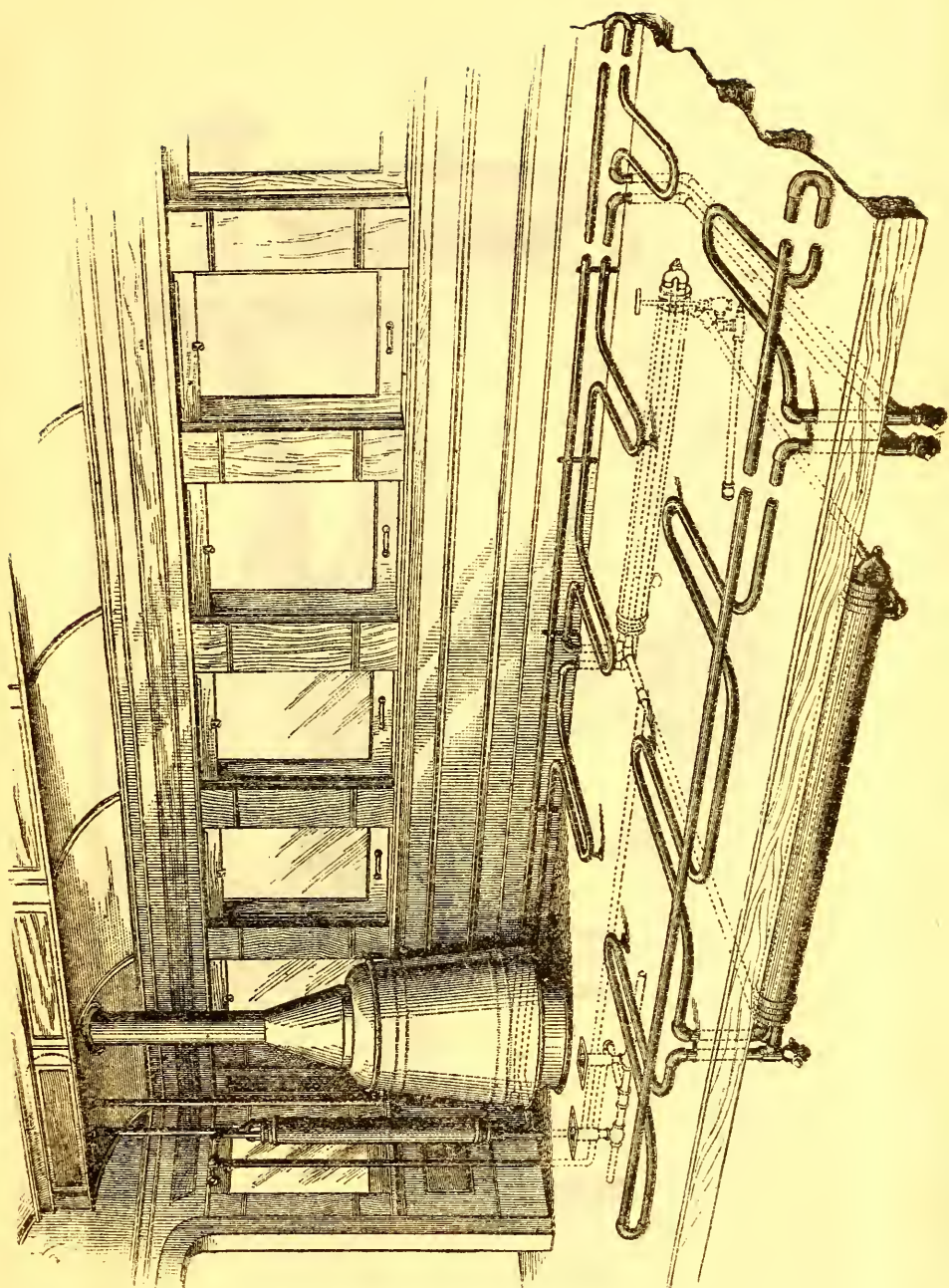




PLATE VII.







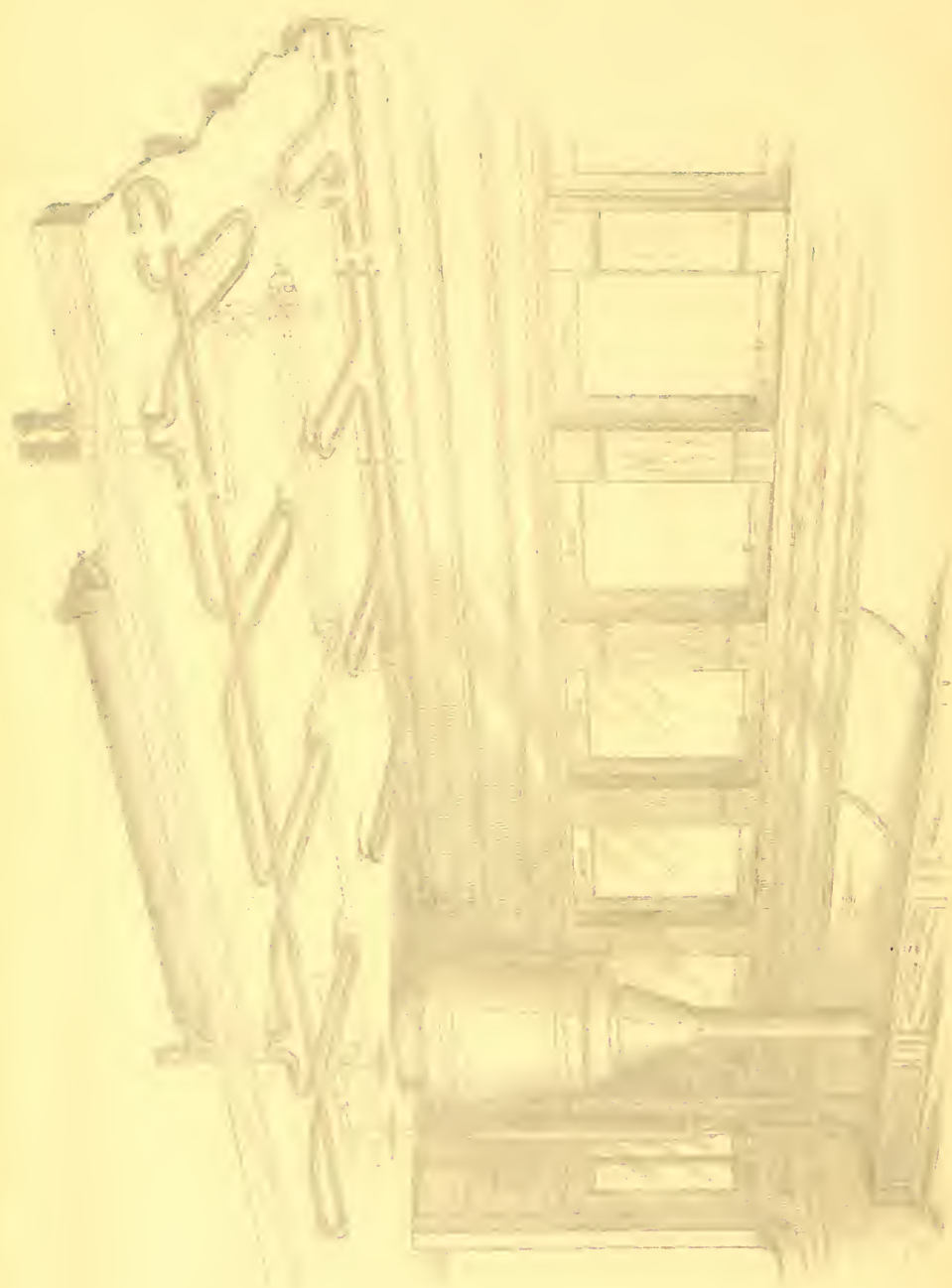
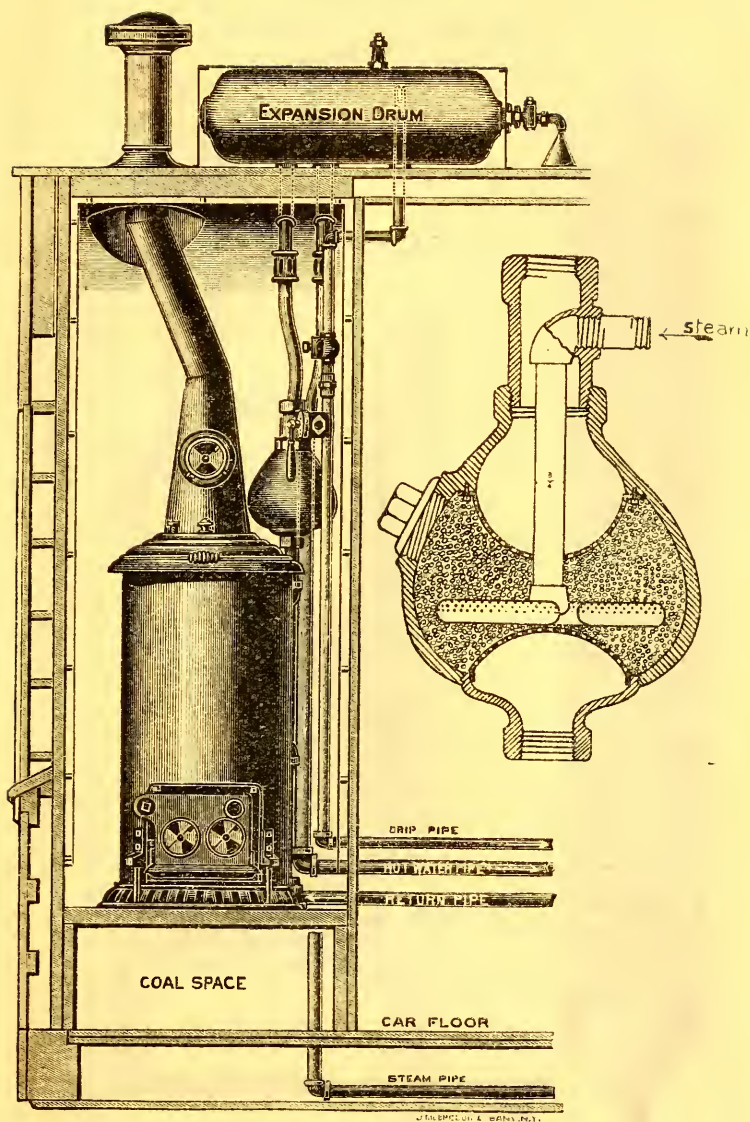




PLATE X.



COMMINGLER SYSTEM.

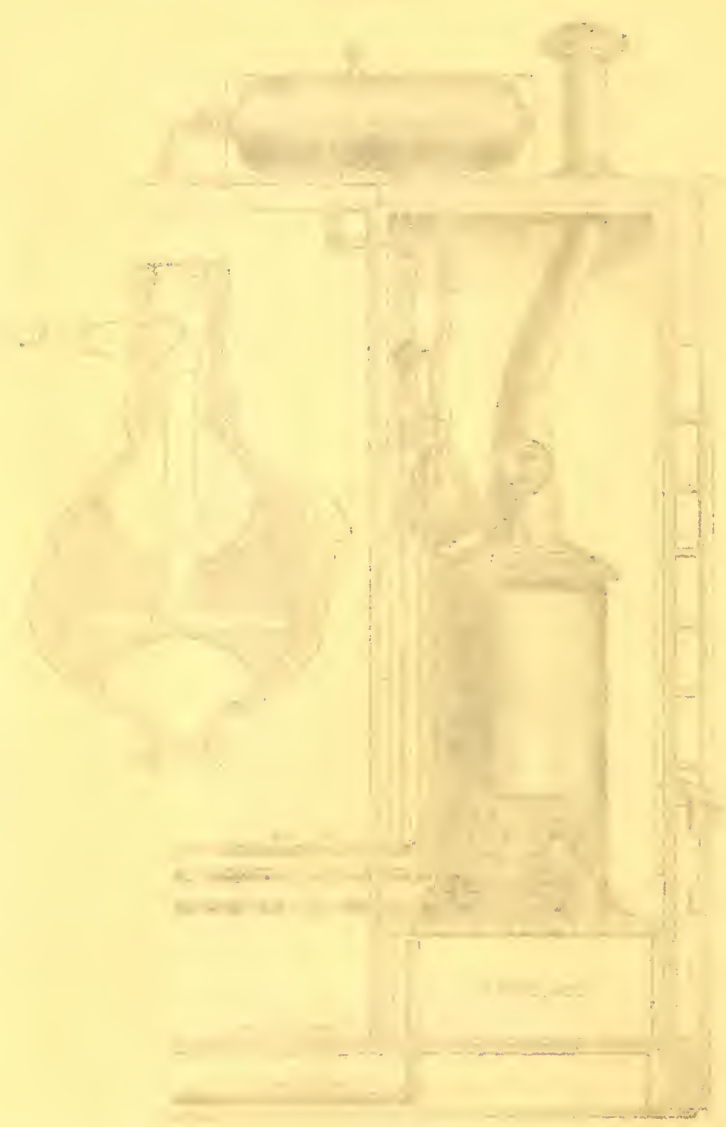
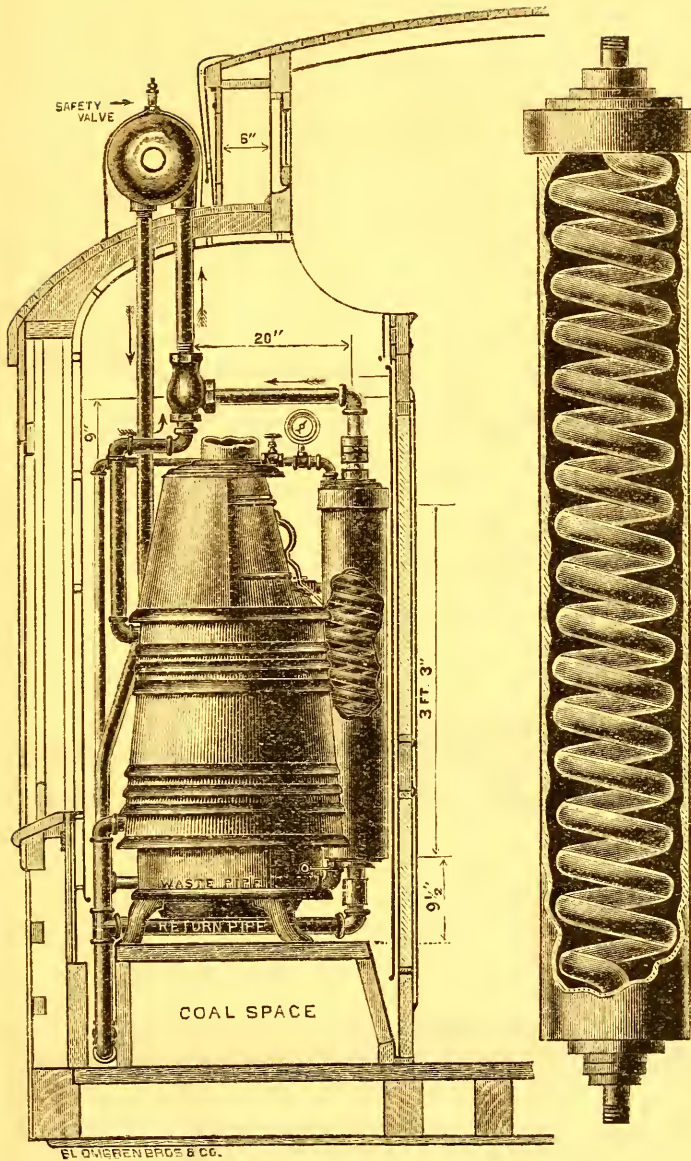


Fig. 1. A. S. 1840.

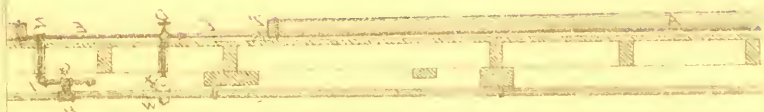
PLATE XI.



COIL DRUM SYSTEM.



PLATE



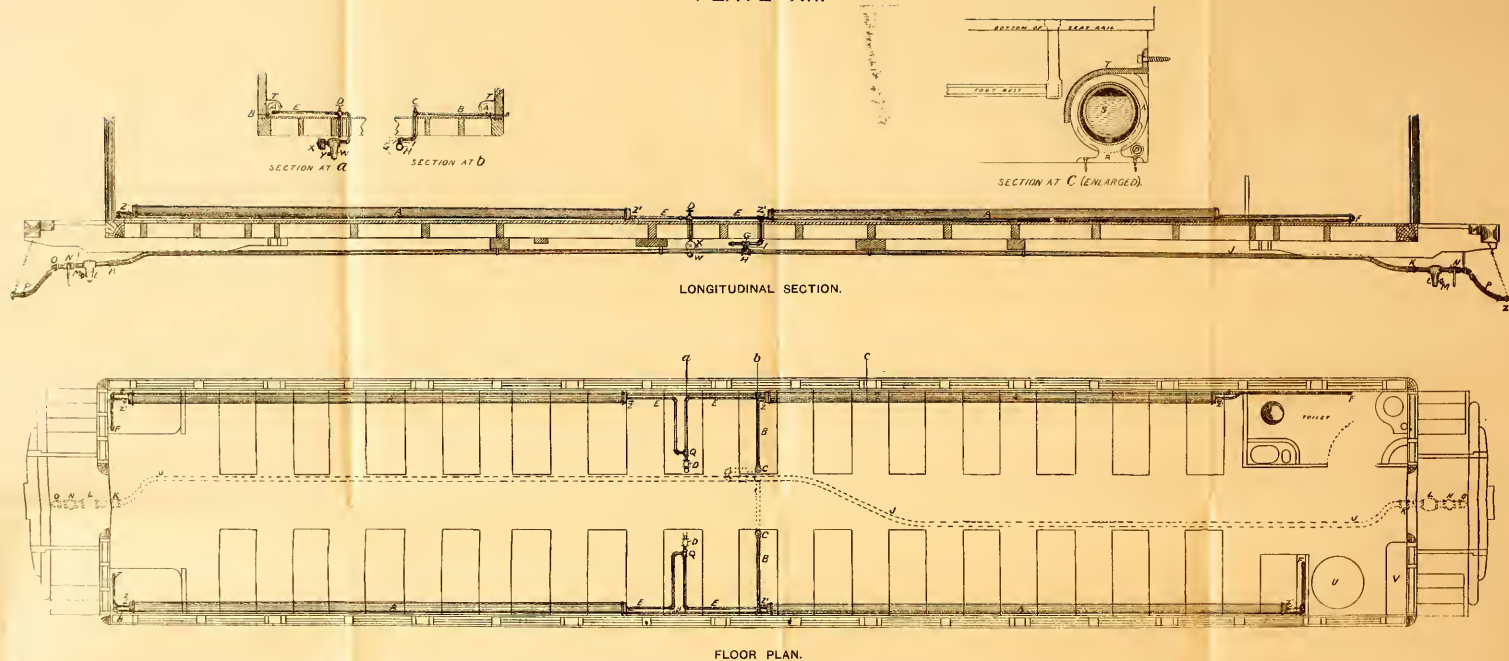
LONGITUDINAL







# PLATE XII.



GOLD CAR HEATING CO.'S STORAGE HEATER SYSTEM OF WARMING PASSENGER CARS.



PLATE XIII.

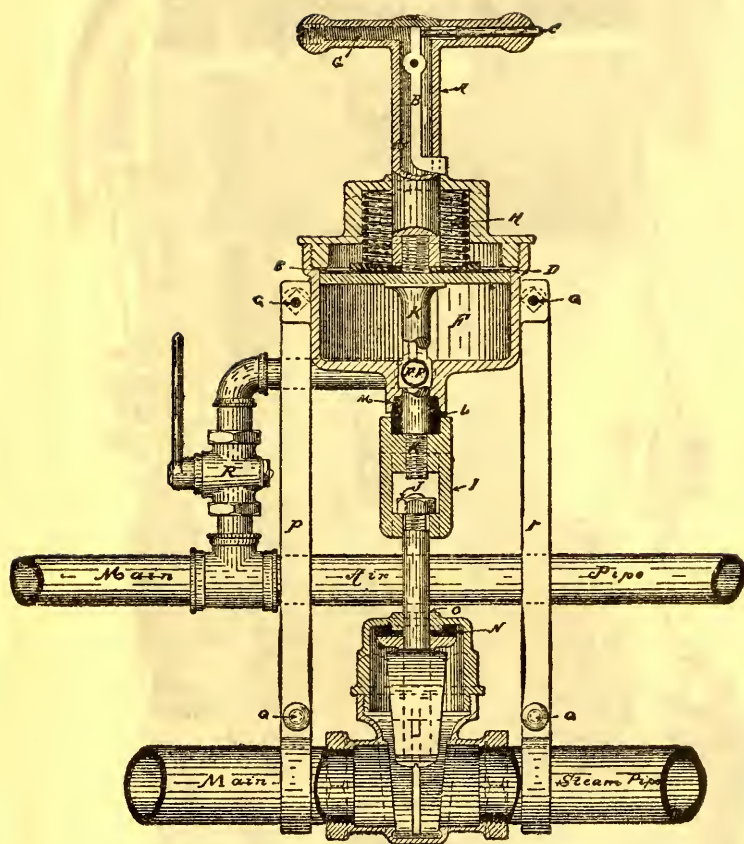


PLATE XIII.

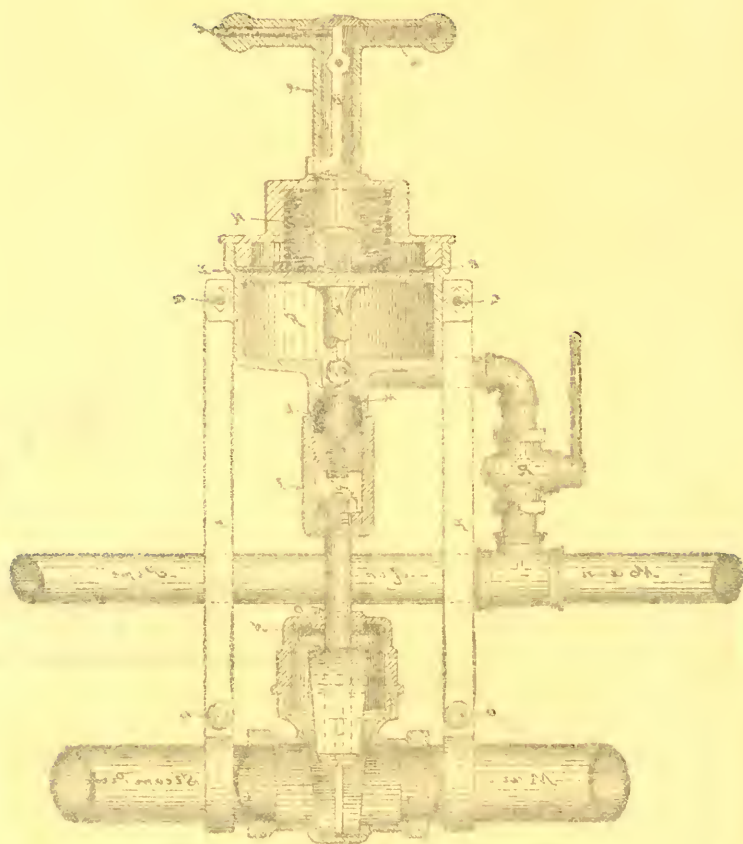
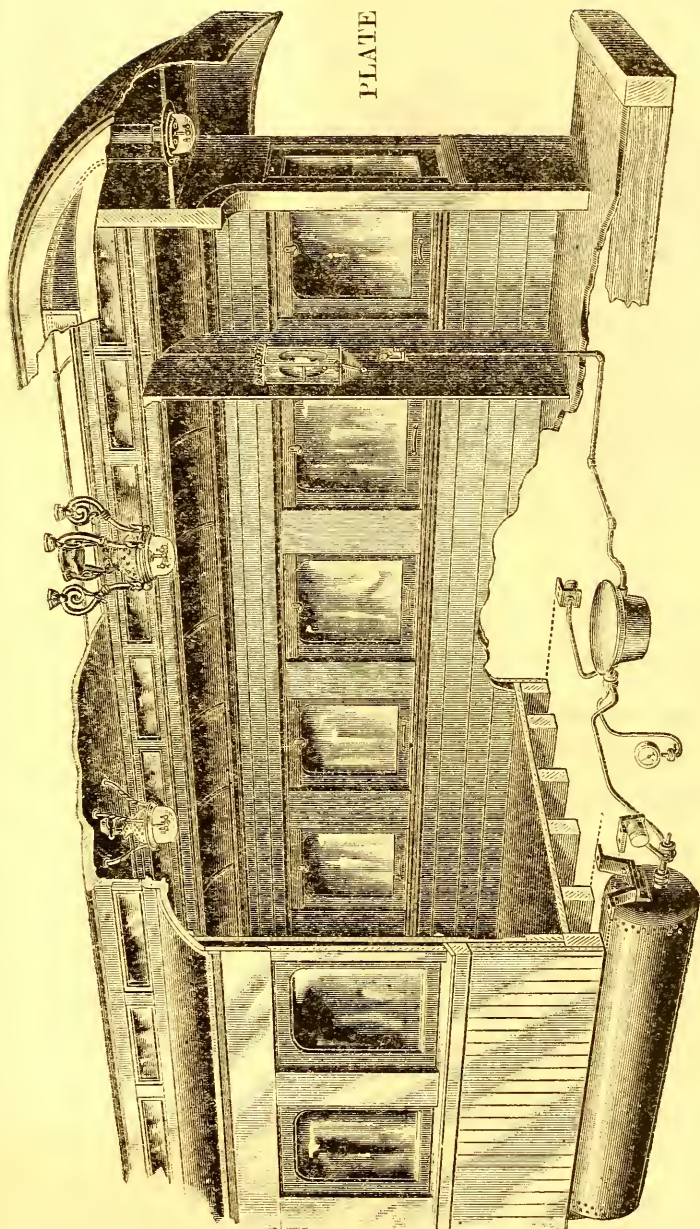
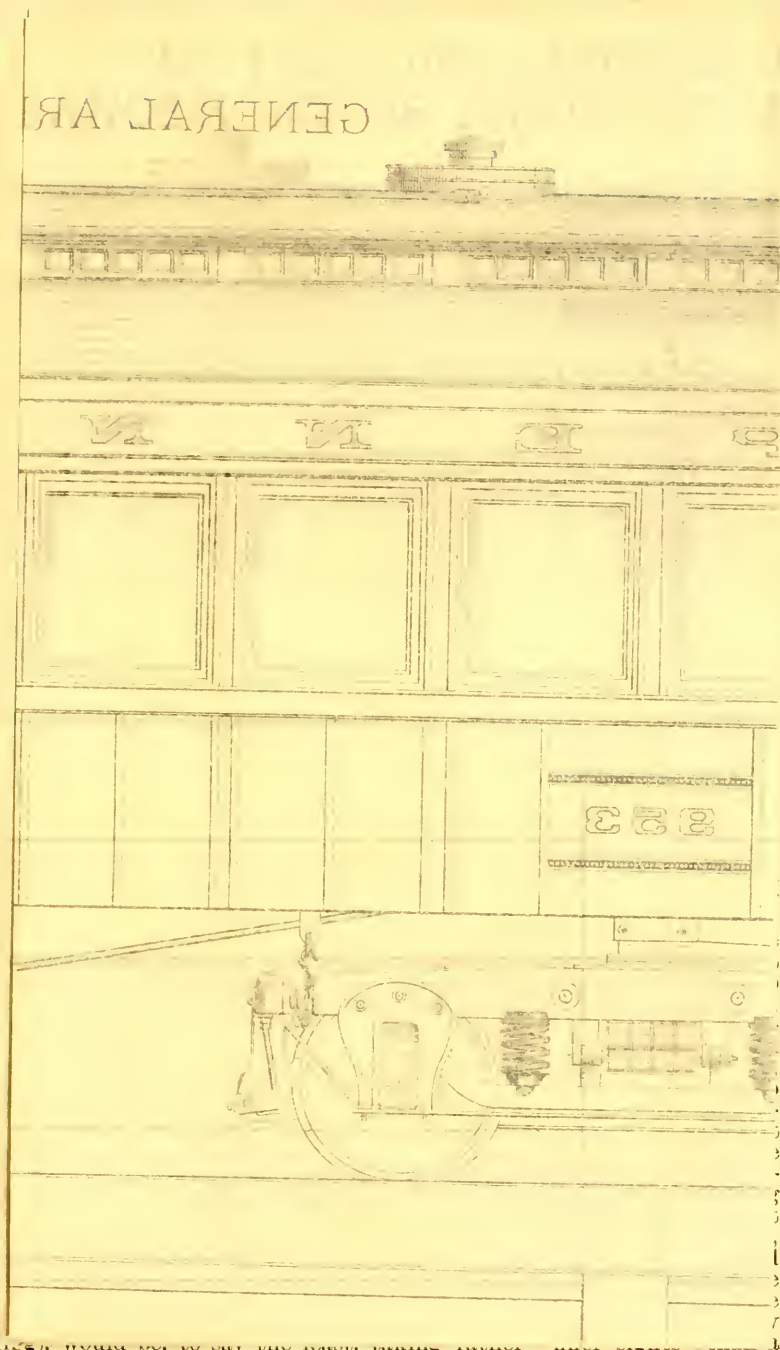




PLATE XIV.







due regard for substantial would justify.

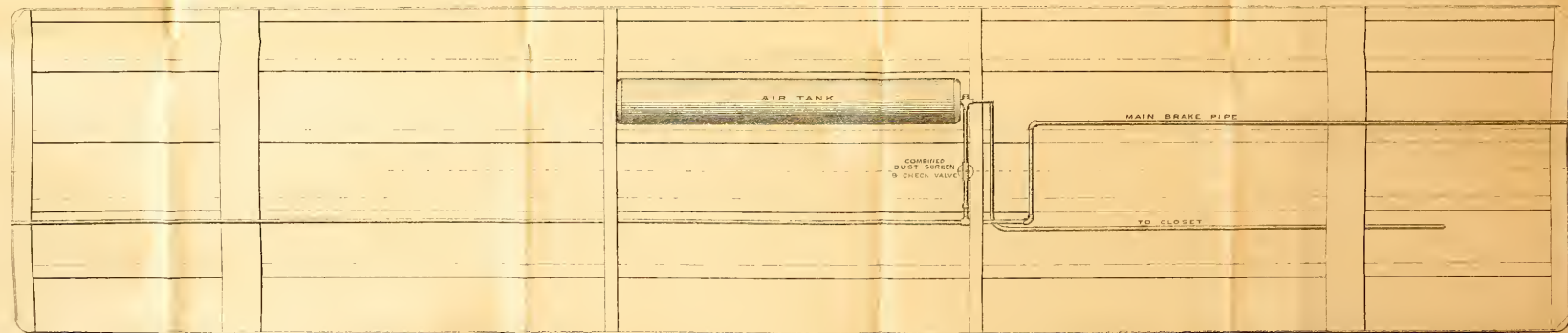
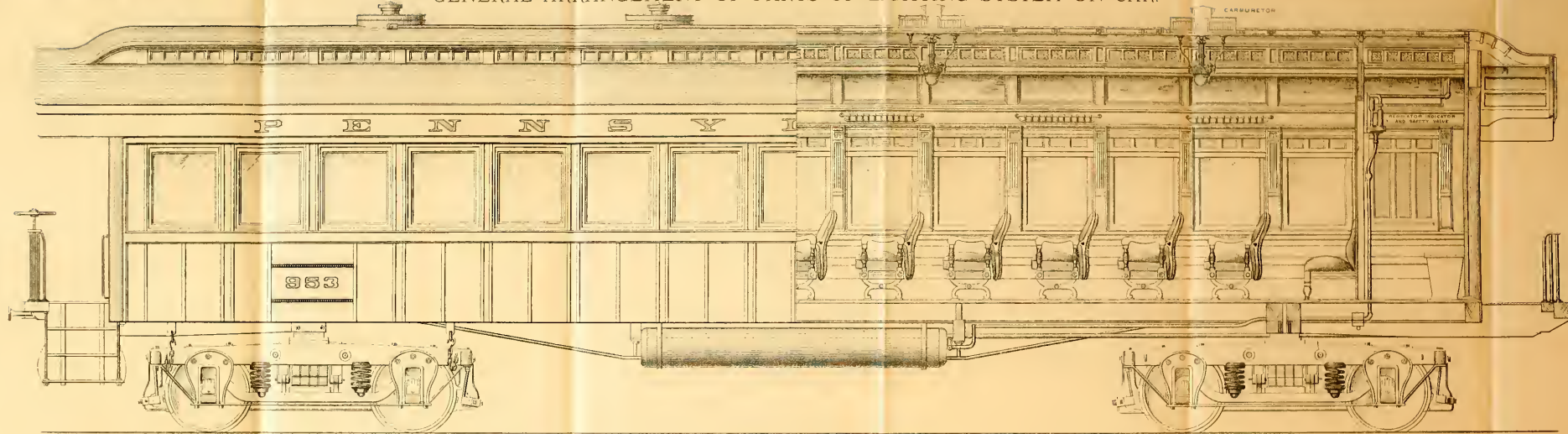
—16 R. R.



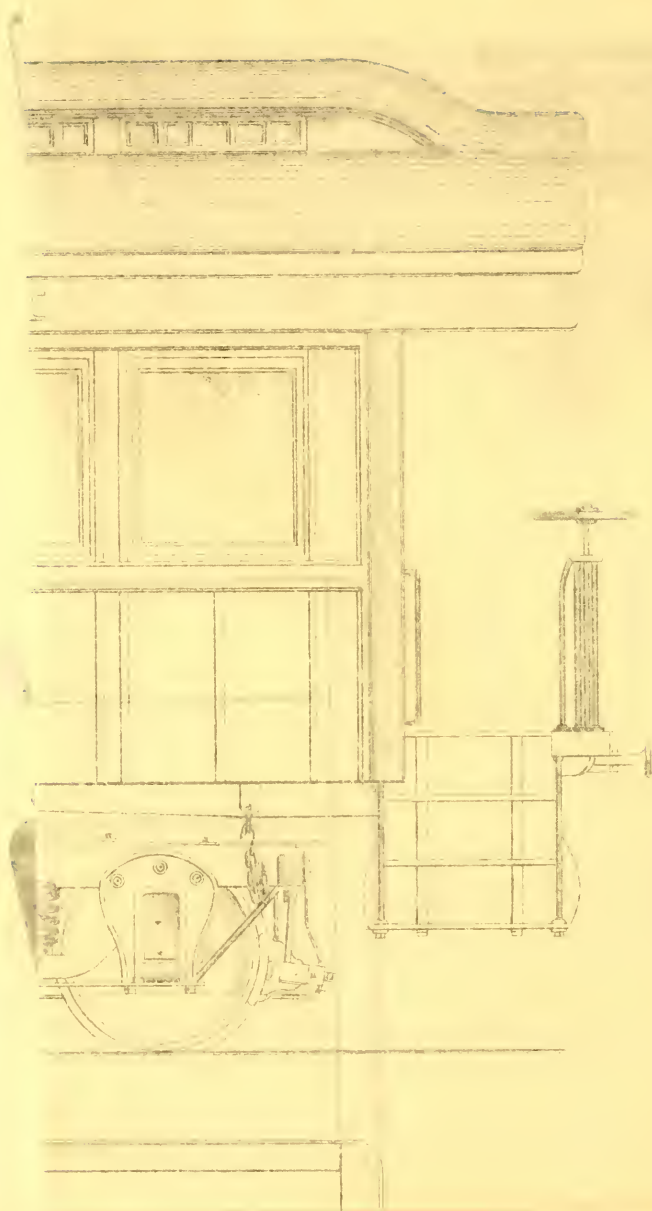
1891-1892



THE FROST DRY CARBURETOR SYSTEM.  
GENERAL ARRANGEMENT OF PARTS OF LIGHTING SYSTEM ON CAR.







## No. 2.

PETITION TO DETERMINE PLACE AND MODE OF CROSS-  
ING.

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*The Chicago, Madison & Northern Railroad Co., Petitioners,*

VS.

*The Chicago & Western Indiana Railroad Co. and the Pitts-  
burgh, Ft. Wayne and Chicago Railway Co., Respondents.*

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## OPINIONS OF COMMISSION.

*Opinion by Phillips, Commissioner:*

Petitioner proposes to cross with its two main tracks, the tracks of the respondent companies upon and near Stewart avenue, in the city of Chicago. It alleges that objection to the proposed crossing is made by respondents, and asks that this Commission enter an order under the act of 1889, prescribing the place where and the manner in which said crossing shall be made. Such formal matters are alleged in the petition as bring the case within the statute.

The first point made relates to the jurisdiction of the Commission, which is questioned upon the ground that respondents did not, prior to the exhibiting of the petition, make specific objection to the crossing as now proposed. The statute says: "If in any case *objection be made* to the place or mode of crossing proposed by the company desiring the same, either party may apply to the Board of Railroad and Warehouse Commissioners, etc." Whether objection to the precise proposition now contained in the petition was ever in terms made by respondents or not, there is no doubt at all that objection is now being made to it, and there is further no doubt that objection to any crossing, unguarded by interlocking devices, has all the time existed, whether such objection was ever formally expressed or not. Ordinarily when a defendant concedes the right claimed in a suit, he comes into court offering to perform all that is demanded, and saying he has ever been willing, and thus makes a question as to plaintiff's right to costs. But there can be between these parties no question of costs, because the statute makes petitioner pay the costs, without regard to the fate of its petition. Were this otherwise, that is, were the costs to abide the result of the suit, as in ordinary cases, and were respondents now disclaiming all objection to petitioner's proposition, offering to let the crossing be constructed as proposed, and asking a dismissal at petitioner's cost upon the ground that no objection had ever been made, the position would better commend itself to our ideas of consistency and justice. But to say, "we now object, but did not formally do so before suit, wherefore we ask that petitioner go out of court," (only, it may be added, to come immediately back again with the same proposition now pending), would be, to say the least, taking rather "finer sights" than a due regard for substantial would justify.

The objection to the jurisdiction should therefore be overruled.

It is contended that the crossing as proposed by petitioner will, if constructed, occasion danger and delay, and that the Commission should, as the case stands, do one of two things, namely: First—either refuse the prayer of the petition and deny the crossing altogether; or, Secondly—allow the crossing only upon condition that a system of interlocking switches and signals be put in covering these crossings and such other points in the neighborhood as would necessarily be comprehended in a practical system. It is strenuously urged that this Commission has power to do either of these things.

To these questions a few words will now be devoted.

And first, would it be proper to simply refuse the prayer of this petition, without making any affirmative order for a crossing? The statute says: "After full investigation, and with due regard to safety of life and property, said board shall give a decision *prescribing the place where, and the manner in which said crossing shall be made.*" This is not equivalent to saying, if the proposed crossing is safe and proper the Commission shall authorize it, and, if the contrary, refuse it. Some crossing, in some place and mode, must, in any event, be provided for; and the decision must "prescribe" a crossing, not deny one. It need not necessarily be the same crossing prayed for in the petition, but may differ from that in place and manner, the word "manner" being used in the sense hereinafter assigned to it. We might vary the place of crossing; and we might compel a crossing over or under, or a crossing at a different angle, or a crossing constructed with different frogs or appliances from those proposed. We might, in short, vary the proposition in any particular which refers to the manner of the location of the *tracks* of the one company across the *tracks* of the other company.

But, in this case there is no contention for a crossing in a different place or in a different mode from that proposed. The Commission might, of its own motion, have the neighborhood of the crossing examined by expert engineers with a view to some variation of place or mode. The interests of respondents are, however, a guarantee of as high vigilance to find a better place and mode as would likely be exercised by any experts we could employ; and since no other place or mode claimed to be better is suggested by any of the parties interested, we may safely conclude a grade crossing in the place and manner proposed will occasion as little danger and delay as any we could select; and a decision must, on this point, be made accordingly.

It only remains, therefore, to determine whether the Commission has power to compel the petitioner, or the parties generally concerned, to guard and operate this crossing (which, we have seen, must be authorized), by means of an interlocking system. Is an interlocking plant embraced in, or any part of, a "crossing," as the term is used in the act of 1889?

The question is a new one. In each of the cases arising under this law, previously decided by the Commission, the petitioner stipulated before the Commission to put in and maintain interlocking devices; and the order entered in each case only embodied the stipulation, without the Commission having really considered the question of its power under the statute in the absence of agreement. The question is therefore as open as though nothing had been contained in the former decisions upon the subject.

The respondents in this case have signified their willingness to submit to this Commission on their part the question of interlocking. We might therefore, so far as they are concerned, if petitioner were also consenting, make an order covering the subject by way of arbitration, exercising not the power conferred by statute, but by the parties. But the petitioner is not consenting, and stands upon its legal rights.

It may be premised that an interlocking machine would be of no efficacy, unless provision were fully made for its maintenance and future operation. It would therefore be idle to order the construction of a

plant, unless we have power to go further and order its maintenance, and its use at this crossing, and clearly, if one power exists, the other must exist also, or the law is futile.

It may be further premised that interlocking devices have more particular reference to the speed of travel than they do to safety. The legislature of this State has for the safety of the public, provided by general statute a certain measure of caution to be observed at all railway crossings, which statutory regulation is as follows:

"All trains running on any railroad in this State, when approaching a crossing with another railroad upon the same level, \* \* \* shall be brought to a full stop before reaching the same, and within eight hundred (800) feet therefrom, and the engineer or other person in charge of the engine attached to the train shall positively ascertain that the way is clear and that the train can safely resume its course before proceeding to pass the \* \* \* crossing."

This precaution is enjoined under a penalty of \$200.00 against the engineer in charge of the train, and \$200.00 against the corporation. Lately, interlocking devices have been brought into use, by means of which the delay from these full stops at crossings may be avoided; and in 1887 the legislature of this State passed a law recognizing these devices, under which law the operating companies are empowered to voluntarily interlock their crossings, and with the sanction and approval of this Commission, run them without stopping. It is the desire for speed, far more than safety, which leads to interlocking. Indeed, it may be questioned whether the use of any device yet invented is more safe than to obey the statutory injunction and come to a full stop.

If, now, we examine more closely this statute of 1887 which did confessedly give to the Commission certain power with reference to interlocking plants, we find that when the legislature had this subject of interlocking before them, and were professedly acting upon it, they gave to the Railway Commission no power to force interlocking upon any unwilling company. Under that act the companies must, by mutual agreement, set up, equip and arrange for the operation of the interlocking plant, leaving to the Commission only the function of inspection and approval. The legislature must have known that there were many old crossings in Illinois where the danger is as great as at the new ones, and the delay, vexatious to travelers. Yet they did not see fit to provide for any other or further interlocking plants than could be mutually agreed upon by the companies concerned. Had the legislature intended to invest this Commission with power to guard the public against danger and delay by means of interlocking devices, is it not reasonable to suppose they would have conferred that power clearly and unmistakably, and have done so in the act upon that particular subject, instead of leaving so important a power to be gathered incidentally, and purely by implication, from an act embracing a wholly different subject matter? And would they not, while about it, have made the power broad enough to include other crossings besides newly constructed ones, which other crossings are as much within the mischief as any; and their equipment could surely as well be paid for by old established companies as that of new crossings could by new and presumably weaker companies?

Nor is this all. This act of 1887, while giving the Commission power to approve crossing devices voluntarily put in, confers no power whatever to compel their continued use and maintenance. The companies which mutually agree to interlock a joint crossing, may mutually agree to abandon the system, and go back to the statutory method of coming to a full stop, and this Commission could exercise no control over their free choice in that particular. It would be interesting to know how we would justify the exercise of a greater power under the act of 1889, which says no word about interlocking, than we could exercise under the act of 1887, which does professedly embody the legislative will upon that subject. And, as before observed, unless we can compel the maintenance and use of a plant, to order its construction, at a cost of many thousands of dollars, would be sheer idleness and folly.



Such being the state of the law when the act of 1889 was passed, let us now look at that particular act, and see if it confers any such power as is here claimed, either expressly given, or necessarily implied.

The most careful reading of the statute reveals to me no power whatever, over the subject of interlocking. The act meets only the case of how one company may cross "*with its tracks* the main lines of another railroad company." The confusion has arisen entirely through a misapprehension of what is included in the word "crossing." It is one thing for a company to cross the line of another "*with its tracks*," and another thing to cross the same point afterwards *with its trains*. The manner in which the tracks shall cross is one thing, and the manner in which trains may cross, or pass, and how they shall be operated, is quite another thing. When we speak of a railway crossing, we properly refer to the position of the tracks of two roads, and not to the passage of trains.

If the act is read with this distinction clearly in view, there seems to be no doubt as to its meaning. The title of the act, which may properly be referred to to aid in a doubtful construction, is in these words: "An act in relation to the crossing of one railway by another, and to prevent danger to life and property *from grade crossings*." Clearly, "the danger to life and property" which was to be prevented was that arising "from grade crossings", as distinguished from those crossings which are not at grade; that is to say: crossings either over or under, and nothing further than this was in the mind of the man who drafted this title.

Passing a step further we find the general declaration that a company "desiring to cross with its tracks the main lines of another \* \* \* shall *construct the crossing* at such place and in such manner as will not unnecessarily impede or endanger the travel, etc." It does not say the crossing shall be so guarded after construction as to secure reasonable safety and expedition, but shall be so "constructed" in the first instance as to secure that end. Unless the construction of a crossing can be said to include also both the construction and the operation of an interlocking plant, it is difficult to see what authority so far appears to do the acts contended for.

The same may be said of that clause of the statute which directs a decision "prescribing the place where and the manner in which said *crossing shall be made*." Here is nothing affecting the manner in which a crossing shall be guarded or the manner in which trains shall be operated across it, and it is a "crossing" that is to be "prescribed" and "made" and not an interlocking plant.

Section 2 of the act provides that "the railroad company seeking the crossing shall in all cases bear the entire expense of"—what? An interlocking plant to regulate the operation of trains at the crossing? Not at all. Shall "bear the entire expense of the construction thereof." How does the Commission from this derive the power to make petitioner bear another and much larger expense, not arising from the construction of the crossing proper, but having relation entirely to the manner of operating the trains of the companies?

It is agreed that an interlocking plant, to be effective at this point, must embrace certain crossing points on the Chicago & Alton and the Santa Fe tracks and right of way. Mr. Thomas, general manager of one of the respondents, testified on this point as follows:—

"Q. At Stewart avenue could an interlocking system be put in that would be safe, that did not include all of the tracks at that point?"

"A. It should include all of them."

"Q. That would include what tracks?"

"A. The Madison & Northern, Ft. Wayne & Chicago, Alton, and Western Indiana, and I think the interlocking of the lead track of the Santa Fe."

The Alton and Santa Fe Companies are not before us, and not parties to this proceeding. How, therefore, could we make an order affecting their property and controlling the operation of their trains, which would be



binding upon them? It involves only an elementary principle to say that parties who have not had their day in court cannot be bound by the judgment, even where the subject matter of the proceeding is within the jurisdiction. But where jurisdiction of parties and subject matter are both wanting, the very suggestion of such an order becomes little short of preposterous.

To further illustrate the want of power in the premises, suppose the respondent companies were consenting to nothing in this case, did not even come before us with any suggestion, as would be their undoubted right, and we upon looking over the crossing proposed should believe it improper unless protected by interlocking, could we in such a case make an order which would contemplate the taking or use of respondents' grounds, by the location on them of pipes, boxes, wires, signals and perhaps a tower house, some of the appliances extending thousands of feet upon their lands, the use of which being imperatively commanded, would materially and permanently affect the operation of their trains, and all without their consent? Certainly we would have no such power. And it does not even tend to answer the difficulty to say the order would in that case be for the benefit of respondents. Parties have some right to judge for themselves what is beneficial to their property, and those who would take that delicate function from them must show undoubted legal authority.

That this subject is one within the power of constitutional police regulation by the legislature is not questioned, but the legislature must act before the Commission can act. The case before us cannot be decided upon sentimental notions as to what the law ought to be, but must be met upon the plain issue of what the law in fact is. Nothing in the act of 1887 or 1889 empowers this Commission to compel interlocking, in the absence of the mutual agreement of the parties, nor can any such power be said with reason to be implied as being necessarily involved in the carrying out of the objects of either of those statutes. The precautions for the public safety which are put within the discretion of this Commission by the act of 1889 are such and only such as arise out of a choice of the different ways in which the crossings of railway tracks proper may be constructed, the most obvious distinction being between those which are built on a level and those which are separated, one passing over the other. The question why a larger power has not been conferred may properly be addressed to the legislature.

It is my opinion an order should be entered prescribing a crossing in the place and manner designated in the petition.

Crim. Commissioner—I concur in the conclusions reached in the foregoing opinion.

Wheeler, chairman, dissenting.

I present my views in the case under advisement with great reluctance, but, being unable to reconcile the opinion of a majority of the Commission with the facts and law in the case as I understand them, I am led to dissent from certain of their findings for the following reasons:

My interpretation of the statute under which this hearing is held gives it a broader scope, and a more extended jurisdiction, to the Commission than my associates allow, and, I may add, broader and more extended than the learned counsel for the parties to the controversy admit.

The right of the petitioning company to cross the tracks of the respondent companies at some point is conceded, and no other point being suggested, it may be assumed that the place proposed is the most feasible and the best that can be selected. Therefore, "the place where said crossing shall be made" may be considered established. Thus far the Commission seem to be of one opinion.

The vital point in the controversy, and upon which our views differ, is found in "the manner in which said crossings shall be made." What does the word "manner," as used in the statute, mean? How far does the

question of "manner" extend? Must we confine it to that portion of the respondent companies' "main lines" actually inclosed by the petitioning company's tracks?

The statute under which this case is brought is somewhat obscure, inasmuch as it does not specifically define the meaning of the term, and upon the conclusion reached depends the extent of the jurisdiction of the Commission. The cost of constructing the crossing is provided for in the act; aside from that, the only reservation is found in the question of "damage," which, with the extent of jurisdiction, covers the entire matter in controversy.

The enacting clause of the statute clearly indicates that the intent of its framers was "to prevent danger to life and property from grade crossings," and in its first section it is expressly stipulated that the Commission shall have "due regard to safety of life and property," and "shall prescribe the manner in which said crossing shall be made." Can there be any doubt about the intention of the law-making power? The question of safety is made paramount—the first to be considered—one that must not be lost sight of; therefore, I conclude that a reasonable construction of this clause places all matters pertaining to the question of safety within the jurisdiction of the Commission, including the side tracks, switches, turn-outs, etc., of all companies adjacent to and affected by the crossing. All of these, in my opinion, are covered by the statute, and must be subject to the restrictions contemplated by the law.

Assuming this view to be correct, do we not fail in our duty if we ignore the plain intent of the law and allow a crossing in a locality teeming with human life, without such safety appliances as will reduce the element of danger to a minimum?

But, it is argued, safety appliances concern only the operation of railroads, a question not referred to this Commission by the act, therefore it is outside of and beyond our jurisdiction. In answer, permit me to say that while I claim no right to impose conditions on, or in any manner interfere with, any crossing constructed or located prior to the time the present act went into effect, i. e. July 1, 1889, I am clearly of the opinion that we not only have the right, but it is our solemn duty, to require proper safeguards for public protection in all cases arising subsequent to that date, failing in which, the community will hold us responsible for any disaster that may occur.

Again, we are told that interests other than those of the parties to this case will be disturbed by the construction and operation of safety appliances, interests not submitted to us for adjudication, and any decision of this Commission affecting such interests will not be recognized as binding by the parties thereto. In reply, it may be said that, while all parties which may be directly or indirectly interested in the decision of the Commission have an undoubted right to a hearing, our authority to act in the premises is not abrogated by their failure to appear, and our duty to render a decision covering the whole question remains whether they do or do not appear.

How far the question of damages extends is, perhaps, more difficult to determine. It may not, however, be unreasonable to claim that it covers only such property as is rendered wholly or partially useless by the tracks of the petitioning company and the necessary safety appliances. In my opinion it does not include the cost of such appliances, their operation or maintenance, these being an expense, not a damage. My conclusions therefore are:

1st. The law as enacted gives the Commission full jurisdiction over all questions pertaining to crossings at grade, cost of crossing and damage excepted.

2d. The Commission has the right to name the place of crossing, and the right to prescribe the manner as well.

3d. In prescribing the manner, the Commission has the power to require such appliances as will insure a reasonable degree of safety to the public.

4th. The cost of constructing, operating and maintaining the necessary safety appliances does not fall under the question of damage.

5th. The Commission has no right to grant the request of the petitioning company without requiring such safety appliances as will render the crossing practically safe.

The following order was entered by Commission:

|  |  |
|--|--|
| CHICAGO, MADISON & NORTHERN R. R. Co.,   | } <i>Petition to determine place<br/>and mode of crossing.</i> |
| VERSUS   |  |
| CHICAGO & WESTERN INDIANA R. R. Co. AND<br>PITTSBURGH, FT. WAYNE & CHICAGO RY. Co. |  |

In the matter of the above petition it is decided and ordered by the Commission that petitioner have leave to cross with its tracks the main lines and tracks of the respondent companies at the place and in the manner designated in its petition, and as shown upon the plat attached to said petition.

SPRINGFIELD, ILLINOIS, April 17, 1890.

## No. 3.

## PETITION FOR LEAVE TO CROSS.

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*St. Louis & Eastern Railway Co., Petitioner.*

vs.

*Toledo, St. Louis & Kansas City Railroad Co., Respondent.*

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*Opinion by Phillips, Commissioner:*

This is an application of the St. Louis & Eastern Railway Company for leave to cross with its proposed track the track of the Toledo, St. Louis & Kansas City Railroad Company at a point about three-quarters of a mile east of the station called Peters, in Madison county, Illinois. Respondent resists, alleging that a crossing at the point proposed by petitioner will "unnecessarily impede and endanger the travel and transportation" upon respondent's road.

Respondent, however, offers to allow a crossing at the point proposed, provided petitioner will at its own expense set up and maintain interlocking at such crossing; or it offers to permit petitioner to cross without interlocking at a point a little over a half mile further west than the place proposed. Petitioner declines both these offers and insists upon the crossing proposed without interlocking.

Respondent alleges in its answer "that the proposed crossing is at the foot of a working grade of from thirty-five to forty feet to the mile; that the result of such crossing will be to compel all trains upon the Toledo, St. Louis & Kansas City Railroad to stop at the foot of such grade, and thereby lose the momentum necessary to carry trains of ordinary size over such grade;" that a crossing at this point will necessitate diminishing the train load on respondent's road by several cars, thus increasing the expense of operation, as well as delaying and interfering with traffic; and that its management had already decided upon a change of grade at the proposed point of crossing, rendered necessary in the economical operation of its road, which road, it is alleged, is in the course of being reconstructed, this grade being among the last to be changed.

The evidence on which we are asked by petitioner to order this crossing is meager and unsatisfactory. Two witnesses testified for complainant, stating in terms (without objection) that a crossing at the point proposed "would not unnecessarily impede or endanger the travel and transportation upon respondent's road," and this general conclusion was, in a manner, supported by further expert theoretical testimony given by the same witnesses.

The testimony does not inform us as to the actual state of traffic on respondent's road, how many and what kind and weight of trains it runs, or any other of the many specific facts which might readily have been made the subject of observation and have been put before the Commission. Neither did



any witness who had had actual experience in handling engines, or in hauling trains over grades of this kind, testify before us. We confess to some prejudice in favor of the notion that the best way to prove how the running of freight trains is affected by the grade at the point of proposed crossing, and what freight locomotives can haul there, and what speed and "momentum" must be acquired at that point to insure the ascent of the grade eastward, would be to show what is actually done by the freight trains that daily pass this point and ascend this grade. No evidence on this line was offered.

The expert testimony offered by complainant was controverted by the chief engineer of respondent, whose testimony substantially and very plausibly supports the objections to this crossing stated in the answer of respondent.

The petitioner held the burden of proof and ought to have made clear, by a preponderance of the evidence, the fact that this crossing will not unnecessarily impede and endanger respondent's traffic. This could not be done by witnesses swearing to that *conclusion* in terms as they did. The general conclusion as to the propriety of the crossing is for the Commission, not for witnesses. Actual facts should have been placed before us on which we could judge.

The railroad first upon the ground gains important rights by the fact of its presence. The use of its line ought not to be lightly interfered with. It was undoubtedly in part the object of the act of 1889, while insuring safety to persons and property transported, to protect established companies in the enjoyment of their rights. One way of arriving at the propriety of a proposed crossing would be to consider whether the line to be crossed would have been built as it is as respects grades, curves, etc., had those building it known a crossing was to be made in the place proposed. Such a test might not be decisive, but is worthy of consideration in every case.

The act of 1889 took away the arbitrary power of new roads to locate crossings at will, and its effect is to put upon them the burden of showing that the crossing will not "unnecessarily" impede and endanger the travel and transportation upon the road crossed. They should point the Commission a clear way to order the crossing desired with proper regard to existing rights and uses. This we cannot say has been done in the case before us. Giving due force to the testimony, the question remains in serious doubt.

In this case it appears from an unchallenged estimate that the increased expense of placing the crossing at the point a half mile further west, as contended for by respondent, would be only \$8,594; unless petitioner should be obliged to purchase nine acres of ground between its right of way and the creek on the south, in which case the cost would be increased to \$10,844, estimating this land at \$250 per acre, which is, it seems to the Commission, a very liberal if not extravagant allowance. Thus, we see, the change contended for by respondent does not involve a large outlay by petitioner, and we are unwilling to permanently obstruct or cripple an established line, or take a serious chance of doing so, where the expenditure of a few thousand dollars will remove all objections.

The petitioning company acquired no equities in the proposed crossing by prematurely grading its road to the point. The correspondence submitted shows the officers of respondent never, expressly or by any fair implication, consented to the crossing unless petitioner would interlock it in the manner stated in the form of contract submitted by them. This is not a case like that of the Chicago, Madison & Northern, where the right of way was acquired and eighty per cent. of the work done before this crossing law was passed. If petitioner, with the law before it, and without either an order of the Commission or the consent of respondent, chose to grade its road for a crossing, it did so on its own responsibility, and at its own peril.

Under the evidence as it stands before us, we are unable to find that a crossing in the place proposed will not, in the language of the act, "unnecessarily impede or endanger the travel or transportation upon the railway crossed."



## DECISION.

It is therefore decided and ordered that the petitioner, the St. Louis & Eastern Railway Company, have leave, and it is hereby empowered, to cross with its track the main line and track of the Toledo, St. Louis & Kansas City Railroad Company at grade at a point in the N. E. quarter of the N. W. quarter of Section 4, Town 3, North Range 8, West of the 3d P. M., 2,940 feet west of the point named for said crossing in the petition filed in this case.

The point of crossing hereby established is marked by the letter "B" upon the plat submitted by petitioner and now with the files in this cause, to which plat reference is hereby made for greater certainty.

It is ordered that petitioner pay all costs and expenses of the Commission incurred under its petition.

SPRINGFIELD, ILLINOIS, January 7, 1891.

No. 4.

## EXTORTION AND UNJUST DISCRIMINATION.

## COMPLAINT.

*Joseph Taylor, of O'Fallon, Ill., Complainant,*

VS.

*The Ohio & Mississippi Ry. Co., Respondent.*

## OPINION OF COMMISSION.

*Opinion by Phillips, Commissioner:*

Complainant, Joseph Taylor, in 1888, opened a coal mine in St. Clair county, some twelve miles from East St. Louis, between the stations O'Fallon and Alma, and a distance of 2,800 feet north of the line of defendant's railroad. While the shaft was being sunk, Taylor applied to president Barnard, of the railway company, to put down a track from the railroad to his coal shaft, which the president declined to do. The negotiations were partly oral and partly by correspondence.

On July 11, President Barnard wrote Taylor:

"How do you propose to get the coal, provided the track is laid from your mine, to the tracks on the company's right of way? Have you counted upon the company being willing to make the delay and the extra run without charge, or do you propose to haul it by mules or horses, or otherwise." Also, "With satisfactory assurance that a much increased business can be secured at such rates as we can get, or are willing to make, on coal, I shall be able to determine to what extent we can afford to put money into side tracks to so aid the development of your property."

On August 13, President Barnard again wrote Taylor:

"I have to advise you that this company will only undertake to put down such tracks as may be on its right of way. If you wish to reach your shaft, therefore, you had better make arrangements to procure rails, spikes, ties, etc., for the laying of the tracks yourself. Another thing to be considered will be the getting of cars to and from the mine, as we cannot afford, with the low rates that we get from Alma to St. Louis, to stop trains on the main line and run engines a half a mile from it to get loads and place empties."

And on November 13, Taylor wrote Barnard:

"In regard to grading, etc., and side tracks at my mine would say that the grading, etc., is about completed, and that I have several teams at work in order to have all in readiness. Wish you would rush the matter and have the material on hand at the time. Hope you will use every effort to have the rails, etc., on the ground without delay, as I am really anxious to have it done as soon as possible, as will soon be to the coal."

To this Barnard replied November 14, "I have your letter of the 13th, inst., but cannot understand what you mean. I told you when you were here I would have Mr. Stevens endeavor to find out what you could get rails for and let you know. I told you also where I thought you could buy. This company has not undertaken to procure material for your track, and not only that, I advised you about where you could get them yourself, and I think Mr. Stevens may have told you (I am not sure of this), where you could buy and at what price. I told you we would only lay the track necessary for the connection so much as run on the O. & M. right of way. You cannot have misunderstood this."

Taylor subsequently at his own expense built his track, with some advice and help from the company's engineer. The track thus built extends from the company's main track and at substantially a right angle therewith, a distance of 2,800 feet to the mine.

There was other correspondence and negotiations, but the above suffices to show the circumstance under which Mr. Taylor's track was built, and the connection made with the defendant's road.

About three miles east of Taylor's mine, and further from East St. Louis, are the Consumers' and Crowson's mines, both of which are situated practically upon the right of way of defendant, the switches and tracks leading to them being almost, if not entirely, upon the company's right of way. The principal point of the complaint is that defendant company charges from the Consumers' and Crowson's mines 45cts. per ton freight for shipment of coal to East St. Louis, while from Taylor's mine it charges the same price, 45cts. per ton, and in addition thereto, one dollar per car as a switching charge for the service of placing empties and carrying loads from Taylor's mine to the main track, 2,800 feet. No switching charge is made in the case of shipments from the Consumers' and Crowson's mines. The facts are not disputed. The company concedes having made these switching charges on all of Taylor's shipments, and avows its purpose to continue them.

Complainant claims this extra dollar per car constitutes both an extortion and an unjust discrimination under the statute of this State; and the Commission is asked to prosecute the defendant for the penalties denounced by the statute against these offenses.

So far as extortion is concerned, the case is not difficult. If the company may rightly make a switching charge for the transportation of cars over Taylor's road, then the amount of one dollar per car, being within the maximum switching charge fixed by the Commission, can not be said to be extortionate. The real question is whether the company may rightfully charge at all for this service. If it may not, that is to say, if for the present purpose the track laid by Taylor is to be regarded as part of defendant's road, and his mine is to be regarded as a station on that road, as contended, then the charge as to discrimination would seem to be made out.

We have examined the numerous Illinois decisions cited by complainant's counsel. Most of these arose under section 5, article 13, of the constitution, which provides:

"All railroad companies receiving and transporting grain in bulk or otherwise, shall deliver the same to any consignee thereof, or any elevator or public warehouse to which it may be consigned, providing such consignee, or the elevator or public warehouse can be reached by any track owned, leased or used, or which can be used by such railroad companies;

and all railroad companies *shall permit connections to be made* with their tracks, so that any such consignee and any public warehouse, coal bank or coal yard may be reached by the cars on said railroad."

Under the above provision, the Supreme Court holds (in language no more plain, it may be observed, than the constitution itself,) that railroads are bound to deliver cars of grain at the particular warehouse or elevator to which they are consigned, if accessible by any track belonging to the company or which the company has the right to use.

*Vincent vs. C. & A. R. R.*, 49 Ill. 33.

*People vs. C. & A. R. R.*, 55 Ill. 95.

*C. & N. W. Ry. Co. vs. People*, 56 Ill. 365.

*Hoyt vs. C., B. & Q.* 93 Ill. 601.

And in such a case no extra switching charge for delivering cars of grain at an elevator reached by such track, can be made.

*Vincent vs. C. & A. R. R. Co.*, 49 Ill. 33.

But the company would not be bound to procure for that purpose from another company, or person, the right to use a track required for such delivery.

*People vs. C. & A. R. R. Co.*, 55 Ill. 95.

And, it seems, where the delivery would occasion great inconvenience to the company, it would be excused from such delivery, even though having a right to use the necessary tracks.

*C. & N. W. Ry. Co. vs. People*, 56 Ill. 365.

All these cases hold that any switch or track extending from a company's main track to any such elevator, whether such track is owned or leased by such company or not, if put there for the accommodation of the elevator, by some arrangement under which the road can use it, is to be regarded as a part of the company's line *for the purpose of the delivery of grain*.

The foregoing cases, however, relate solely to the delivery of cars of grain, which is expressly enjoined by the constitution.

With regard to coal mines, the constitutional provision quoted above is, simply, that the company "*shall permit connection to be made with their tracks,*" which it will be seen is essentially different in its terms from the provision in regard to grain deliveries.

In a late case it was held that a railroad company could not disconnect a switch which had been laid to a coal mine and which had for several years been used for making shipments of coal therefrom.

*C. & A. R. R. Co. v. Suffern*, 129 Ill. 274.

Commenting on the above constitutional provision in its relation to coal mine connections, the court says, in the Suffern case:

"It was the evident design of the constitutional provision above quoted to compel the railroads to furnish the coal mines in the State with all necessary facilities for the shipment and transportation of coal. As the railroad companies must deliver grain to all elevators upon the lines of their road, or connected therewith by side tracks, so also must they receive shipments of coal from all coal mines on the lines of their roads or connected therewith by side tracks."

The *Suffern case* was a petition for *mandamus*, and, as bearing upon the present inquiry, that case enlightens us no further than to show that Taylor has the undoubted right, under the foregoing clause of the con-



stitution, to have his track and mine connected with defendant's road. The constitution commands defendant to "permit connection to be made" with Taylor's coal mine. This it has done. The constitution did not command defendant to build a track, extending 2,800 feet off from its own right of way, to reach this mine; and this it refused to do.

The connection has been made; and no question arises here, as in the *Suffern case*, as to any right of the company to sever such connection. It is not proposing to sever it. Nor does any question arise here as to the right of defendant to refuse to receive and transport coal from Taylor's mine. It has not so refused. What the company does refuse to do is to take empty cars from the track to the mine, and loaded cars from the mine to the track, 2,800 feet, unless it is paid for that service extra, over and above the regular freight rate which obtains from the point of connection.

Undoubtedly, if Taylor would arrange to deliver his coal at the right of way he would avoid this charge, and would then have the right to have his coal transported at the regular rate of freight, and no more. The real question is, has he a right, under the above quoted provision of the constitution, to compel defendant to operate his 2,800 feet of railroad without compensation? It seems to the Commission he has not that right. If he may compel defendant to operate his 2,800 feet of road gratis, may not some one else compel it to operate a road a mile, two miles, or five miles in length, gratis? Where will the line be drawn?

Does the declaration of the court in the *Suffern case*, that this constitutional injunction was intended "to compel the railroads to furnish the coal mines in the State with all necessary facilities for the shipment and transportation of coal" mean that the railroads are compelled to furnish those facilities gratuitously, long distances beyond their own switches and tracks, wherever the mine owner may build a track and tender it? Does the further declaration of the Court in that case, that railroad companies "must receive shipments of coal from all coal mines on the lines of their roads or connected therewith by side tracks" mean that such companies must receive such shipments at some distant point upon a track built by others, or does it mean only that the roads shall receive such shipments at their own respective rights of way on switches or in yards established for the purpose?

We think such a construction as is contended for would extend the constitution far beyond the cases meant to be provided for by its framers.

We can well understand how a company might, by its own acts, or by contract, bind itself to perform such a service gratuitously. We can understand how, in many cases, railroad companies, for the sake of developing the coal fields along their rights of way, thereby enhancing their own trade and earnings, might enter into arrangements with coal operators, whereby they would be estopped to make switching charges, even in cases where the extra service might be larger than is here demanded of defendant. Doubtless some of the cases related in the testimony offered by complainant, as to the practice upon other roads in this same coal field, are of this character. But the fact, if it exists, that other roads have made such arrangements, furnishes no ground upon which to predicate a rule of law which will bind defendant. It may be, if it were shown that this same company was accustomed to perform a like service for other mine owners on its line, and competing in this field, without charging for it, that fact would furnish a basis for a prosecution for discrimination. But the other mines, whose shipments have been compared with complainant's for the purpose of making out the discrimination, are located immediately upon defendant's right of way. It performs no switching service for those companies, so far as the evidence discloses.

In the case of complainant, it cannot with justice be claimed in the light of the evidence, as was claimed by the petition, that defendant either



promised complainant, or by its acts induced him to believe that it would operate his track without charge. He was plainly told by letter, as he admits, and in conversation as President Barnard testifies, that he must pay for this service, and that too before his track was laid, or any considerable work had been done upon his mine.

While we realize fully the disadvantage under which complainant labors in the present state of competition felt in the coal trade, we are not convinced that the law affords any remedy, and greatly fear that a prosecution for either extortion or discrimination would fail.

The petition will therefore be dismissed.

SPRINGFIELD, ILLINOIS, September 20, 1890.

No. 5.

## EXTORTION.

## COMPLAINT.

*P. Wonderly & Co., Complainants.*

VS.

*The Wabash Railroad Co., Respondent.*

## OPINION OF COMMISSION.

*Opinion by Wheeler, Chairman:*

Complainants charge the Wabash Railroad Company with a violation of the Commissioners' rules governing switching charges, claiming the revenue collected to be excessive, and ask the Commission to compel the railroad company to refund the overcharge.

This cannot be effected without a suit at law and before this step is taken we must consider this question: Can the charge be proven? On the evidence furnished we think not. If complainants will carefully consider the rule referred to we think they will conclude with us that the business does not fall under the rule. "Switching," as defined by the rule "includes the hauling of loaded cars from the station yards \* \* \* \* to the junction of other railroads when not billed from stations on its own road to said junction, and from junctions of other railroads to the stations, side tracks, \* \* \* \* situated on the tracks owned or controlled by the railroad company doing said switching. In other words, switching is that transfer charge ordinarily made for moving loaded cars for short distances for which no regular way bill is made, \* \* \* \*."

In the case under advisement it does not appear that the business done is of the character covered by the rule; on the contrary the expense bills before us are in the form of regular billing from station to station with revenue charges based on the maximum rates prescribed by our predecessors and still in force. Possibly these rates are excessive, but, till reduced by the proper authority they must be accepted as legal, unless discrimination is shown, which thus far is not claimed.

After a careful consideration of the facts confronting us the Commission is of the opinion that a charge of extortion cannot be sustained, and being hopeless of securing an affirmative verdict we do not deem it expedient to commence a suit with almost the certainty of being thrown out of court. If complainants can furnish evidence that will insure success, the Commission will gladly bring suit; but as the case now stands we think their good judgment will endorse our position as above indicated.

The complaint will therefore be stricken from the docket.

SPRINGFIELD, ILLINOIS, Oct. 24, 1890.

No. 6.

## REFUSAL TO SWITCH CARS.

## COMPLAINT.

*Union Brewing Company, of Peoria, Complainant,*

VS.

*The Chicago, Burlington & Quincy R. R. Co., Respondent.*

## OPINION OF COMMISSION.

*Opinion by Phillips, Commissioner:*

This is a complaint by the Union Brewing Co., a corporation of Peoria, Ill., against the C., B. & Q. R. R. Co., alleging a refusal to switch cars.

Switching has been defined by the Commission to be, "the hauling of loaded cars from station yards, side tracks, elevators or warehouses to the junctions of other railroads when not billed from stations on its own road to said junctions, and from junctions of other railroads to the stations, side tracks, elevators and warehouses situated on the tracks owned or controlled by the railroad company doing said switching. In other words, switching is that transfer charge ordinarily made for moving loaded cars for short distances for which no regular way bill is made, and which do not move between two regularly established stations on the same road."

A particular car loaded with "cerealine", and billed to complainant, was transported to Peoria by the C., C., C. & St. L. Ry. Co., and was either by the carrying company, or an intervening company delivered to respondent, and marked for "Carson's track." Carson's track is a team track of respondent, one block from complainant's brewery, on which complainant was accustomed to receive its cars of freight. Respondent after receiving this car in fact switched it to Carson's track, not knowing it was for the complainant; but, upon learning whose car it was, the agent of respondent ordered it taken away; and it was then placed upon a team track of the P. & P. U. road, in a place considerably further from the brewery, and much less convenient for complainant, where it was finally unloaded.

Respondent declined to switch this car to Carson's track (or rather to leave it there after inadvertently switching it), and declines generally to switch any cars for complainant, because of a controversy arising between them as to the payment of certain car-service charges, levied through the Car Service Association of Peoria, for the detention of two cars which had

been previously switched by respondent to Carson's track for complainant; which two cars last mentioned had not been unloaded by complainant within forty-eight hours after arrival, which is the time allowed free of charge by the rules of the Car Service Association.

The Car Service Association is composed of the several roads doing business in Peoria. Its object is to prevent the unreasonable detention of cars by consignees; and under its rules a charge of one dollar per day is made against any consignee for each day he fails to unload a car, after the expiration of forty-eight hours from the time such car is set by the railroad company in a proper place for unloading.

In the case of the two cars upon which the unpaid car-service charges were made, the brewing company claims that the railroad company was at fault in failing to give notice of arrival. It also claims that the charge of one dollar per day is unreasonable in amount. The respondent, upon the other hand, claims it was not its duty to give complainant notice of the arrival of these cars, that being the duty of the company transporting them to Peoria, a duty which in this case respondent further insists was in fact performed by the C., C., C. & St. L. Ry. Co. Respondent further claims that the two cars named were placed in plain view of the brewery and only a block away, and that complainant in fact knew the cars were there in time to have unloaded them within the forty-eight hours, if its agents had seen fit; and it urges further that these car-service charges of one dollar per day for detaining cars are proper and reasonable, and that they are in the true interest of shippers, since they prevent the rolling stock of railroads from being tied up to the great disadvantage of those shippers who, for that reason, often cannot get cars.

We thus state the controversy as to these car-service charges, not for the purpose of deciding it, but rather as a help to arrive at what we deem the real question before us. We content ourselves with the single observation that since the statute of this State (Sec. 5, Act "Receiving, Carrying and Delivering Grain,") provides that a consignee of grain transported in bulk "shall have twenty-four hours, *free of expense*, after actual notice of arrival, etc., in which to remove the same from the cars of such railroad corporation," there would seem to be an implied right under the statute to charge for a longer detention than the twenty-four hours which the statute names. Indeed, no reason is perceived in law or justice why an unreasonable and unnecessary detention of cars by consignees should not be paid for; and the Car Service Association seems from the proof before us to be only an agency established to keep account of claims so arising, and enforce them. The charges so made would have to be reasonable, under all the circumstances. The statute does not seem to refer the matter of fixing the maximum of such demurrage charges to this Commission; and the question probably did not occur to the law makers. Car demurrage is an important subject, which has arisen, in a practical way, only within late years, and long after our statute for the regulation of railroads was passed. It does not, however, follow that, because there is no statutory regulation of the question, there is no law. The charge, as before observed, must be reasonable; and what is reasonable in a given case must depend upon the facts of that case, and be arrived at, if the parties cannot themselves agree, by a judicial determination, in a court competent to try the question. Whether or not the seven dollar car-service or demurrage charge made for the detention of the two cars in question is reasonable, under all the circumstances, can only be determined authoritatively and judicially, when the parties carry the case into court. Not being a court for any such purpose, this Commission cannot determine it.

We do not even assume to decide that "cerealine" is "grain" within the meaning of the statute above cited. The nature of the article has not been very fully explained. It is a product of corn, the hull and germ being removed, and is used as a part substitute for malt. We have assumed it to be "grain" in the observations above made.

Respondent does not deny the refusal to switch cars, but expressly avows it; and the important question is, has the railroad company shown a state



of facts which will excuse it from switching cars for complainant to Carson's track. In justification of its refusal the railroad company alleges two grounds, which may be stated in the language of its own answer, as follows:

1. "This company further states, that it does not do or hold itself open to do, a general switching business in the city of Peoria, but states that the service heretofore rendered to the said Union Brewing Co., in so switching these cars, was done for the accommodation of said Union Brewing Co., and are not such services as this company is compelled by law to perform."

2. "This company further denies that the railroad companies, centering in Peoria, and forming such association, have violated any law of the State of Illinois; and it asserts that the rules and regulations of said association are reasonable and lawful, and for the public good, and necessary for the protection of said railroad companies; and it further asserts that the charges herein complained of are just, reasonable and lawful, \* \* \* and that in refusing to switch the cars of the said Union Brewing Co., shipped over foreign lines, until said just and reasonable charges, heretofore exacted, are paid, it has acted in accordance with the law."

The first ground stated seems to imply, that unless a railroad company holds itself out to do "a general switching business," it is under no legal obligation to switch cars. On this we observe that if respondent were confining itself strictly to handling only such cars at Peoria as it transports thither upon its own line, and if "Carson's track" were a track used by it exclusively for the accommodation of its patrons who ship cars to Peoria over its own line, the case would stand on a basis entirely different from that presented by the evidence. Then the question would be presented whether or not the switching of cars from one point to another within the same city, for which no way bill is made, is a service by law demandable from a railway company which does not ordinarily do a switching business.

If this were in fact the case before us, we should hesitate before holding that a switching service can in no case be legally demanded of a railroad company, unless such company does a general switching business. The principle upon which a distinction would be made, between the obligation to haul one mile, and the obligation to haul ten, is very difficult to perceive; and the interests of a patron might become as vitally involved in the one service as in the other. If one wishes a switching service only, and is willing to pay for it, why can he not command the service?

It is, however, unnecessary here to decide any such question. The evidence amply shows that respondent is accustomed to switch cars at Peoria in case of shipments not originating on its own line. It has numerous patrons for whom it switches cars, turned over by other roads, and switches them, too, to the particular track known as "Carson's track." Receipted bills of respondent issued from its "Switching Department," showing the switching of seventy-one such cars at one dollar each, switching charge, have been filed by complainant in this case. Moreover, the company did in fact switch the car in question, supposing it to be the car of another patron, but removed it upon learning it was for complainant. The fact that respondent does switching in the city of Peoria is really not denied. What is denied is that it does "a general switching business."

The question, therefore, is not whether a road which does no switching can by law be made to switch cars, but whether a road may switch for some, and refuse to switch for others: whether it may accommodate some patrons upon a convenient track and arbitrarily exclude others from the same privilege, making them go for their goods to another track less convenient.

We believe the position of respondent upon this question is wholly untenable. The principle of law is fundamental that railroads must treat all alike. They must accommodate all that apply in the order of their applications, extending favors to none, and excluding none from equal par-



ticipation in the use of their facilities. They perform a public calling, to be exercised impartially for every member of the public they were created to serve.

These principles have been so often and so universally held by all courts of the common law that we deem a citation of authorities unnecessary. Indeed, nothing could be more dangerous in practice than to allow the railroads which wield such powerful instrumentalities, on the use of which the welfare of every citizen more or less depends, to choose for themselves whom they will serve. Armed with such a power, the railroads of the land could build up or destroy at will both private fortunes and communities.

We, therefore, are of opinion that since respondent switches cars at Peoria for some of its patrons, it is under a legal obligation to switch impartially for all who apply, and who tender its reasonable charges. We hold, when respondent switched cars for complainant to Carson's track, it performed, not a mere "accommodation," but a legal duty.

The second ground alleged for refusal to perform this switching service remains to be considered: namely, the refusal of complainant to pay the charges for detention of the two former cars. As before remarked, we cannot decide this controversy. We are of opinion, however, that whether this particular charge be legally collectible or not, its non-payment cannot justify a refusal to switch cars for complainant. When complainant demands of the Burlington company a service such as it performs in Peoria for others, tendering it its reasonable charges, that company cannot excuse itself from exercising its legal functions because of an unsettled controverted account, arising out of a wholly different transaction. If complainant owes it for unreasonably detaining cars, the courts are open to it. The account must there be ultimately settled. The railroad company cannot, in our view, determine this question for itself, or hold its switching facilities in the city of Peoria as a mere "accommodation" by the optional use of which it can compel payment of a past disputed claim. This unsettled claim, it will be observed, is not for a switching service, but for another thing—the detention of cars. It could not be known in advance that further car-service charges would accrue upon the cars respondent has been refusing to handle for complainant.

We are of opinion that respondent is not released from the legal duty of switching, by the failure of complainant to pay demurrage charges.

The only question now remaining concerns the remedy. The act creating this Commission provides:

"Said Commissioners shall examine into the condition and management, and all other matters concerning the business of railroads and warehouses in this state, so far as the same pertain to the relation of such roads and warehouses to the public, and to the accommodation and security of persons doing business therewith. \* \* \*

And whenever it shall come to their knowledge either upon complaint or otherwise, or they shall have reason to believe that any such law or laws have been, or are being violated, they shall prosecute, or cause to be prosecuted, all corporations or persons guilty of such violation."

In section 17 of the same act it is provided:

"It shall be the duty of the Attorney General and the State's attorney in every circuit or county, on the request of said Commissioners, to institute and prosecute any and all suits and proceedings which they, or either of them, shall be directed by said Commissioners to institute and prosecute for a violation of this act, or any law of this state concerning railroad companies or warehouses," etc.

Section 18 further provides as follows:

"All such prosecutions shall be in the name of the People of the State of Illinois, and all monies arising therefrom shall be paid into the State Treasury by the sheriff or other officer collecting the same," etc.

The act upon "extortion and unjust discrimination" further provides that the Commission shall enforce that act and "cause suits to be commenced and prosecuted against any railroad corporation which may violate the provisions of this act." It further provides in what counties of the State prosecutions may be begun, authorizes the Commission to employ counsel "to assist the Attorney General," if they think it necessary, and says that no such suit shall be dismissed unless the Commission and the Attorney General both consent thereto.

From the above provisions it seems evident that the "prosecutions" which it is incumbent upon this Commission to institute and conduct are prosecutions for those penalties denounced by the statute against railroad companies for violation of the several provisions of the railroad and warehouse law. It was evidently not intended that the Commission should carry on any man's private suit at public expense. A writ of *mandamus* to compel the switching of cars for complainant, while running in the name of the people, would, in fact, be the private suit of complainant. It would not be a "prosecution" in the sense that term is used in the statute. The statute fixes no fine or penalty for refusal to switch cars. The party damaged by such refusal could no doubt recover his damages: but this, too, would be his private action and not a public prosecution. The courts are open to complainant to prosecute its suit for itself. The intention to confine this Commission to those prosecutions in the name of the people for penalties or the prosecution of such suits as affect the public generally, or large communities of people, is also pointed to by the fact that the act concerning unjust discrimination expressly provides for a private suit by the person discriminated against wherein he may recover treble damages and his attorney's fees.

Inasmuch as the parties had placed this case before us at some length, we have not hesitated, under the injunction of the statute that we shall "examine into the condition and management, and all other matters concerning the business of railroads and warehouses in this State," etc., to thus express our views of the law for the guidance of those who may be affected by them, or may have confidence to follow them; and we hope the matter may be now adjusted between the parties without resort to a judicial determination of the question, which, not being a court in the proper sense, we are not authorized to make.

SPRINGFIELD, ILLINOIS. Dec. 10. 1890.

No. 7.

## REFUSAL TO SWITCH CARS.

## COMPLAINT.

*Lyon & Scott, Complainants,*

vs.

*Peoria & Pekin Union Ry. Co. and the Illinois Car Service Association of Peoria, Respondents.*

## OPINION OF COMMISSION.

*Opinion by Phillips, Commissioner:*

This complaint raises practically the same questions which are discussed in the opinion of the Commission in the complaint of the *Union Brewing Co. v. The C., B. & Q. R. R. Co.*, and we need do little more than refer the parties to the ruling in that case. No evidence has been heard but the conceded facts show that an unpaid car-service charge, concerning the justice of which there is a controversy, has been the principal cause of the refusal to switch cars. One matter is rather indirectly stated in the answer of the P. & P. U. Ry. Co., which might, if proved, take the case out of the principle. It is said the team track opposite blocks 6 and 7, where Lyon & Scott demand to have their coal cars placed, is a "merchandise track," and that Lyon & Scott insist upon having their coal cars placed upon this merchandise track for unloading. It is not precisely averred that this track is held by the company exclusively for merchandise. We can understand how, under some circumstances, it might be highly proper for a company to establish one track for coal and another for merchandise, and if the coal track were suitable and proper for that commodity a coal merchant could not demand to have his coal cars put upon a track properly set apart for a different business. But the principle stated in the Union Brewing Co.'s case, that the railroad company must treat all alike would here apply with its entire force. Special favors could not be arbitrarily extended. If a suitable and proper track for coal cars is offered complainants where other coal merchants are accommodated and the company is ready and willing to switch the cars there, then the refusal to pay the car-service charges would make no figure in the case. Respondent has in that case simply done its duty and is not in default.

The P. & P. U. states in its answer that the delay in transporting the cars of coal which Lyon & Scott sets up as a reason for refusing to pay the car-service charges (alleging that two or three days' business was by the

fault of the carrier thrown upon them at once) was not the fault of the P. & P. U. company, which only switched the cars, but was, if anybody's, the fault of the carrying company. If this can be established then it will show Lyon & Scott must look for their damages for delaying their cars to the company at fault, and that they cannot set it off against a car-service charge of the P. & P. U. company otherwise just and proper. But all this is matter for proof in a court of justice. As observed in the Union Brewing Co.'s case, we cannot settle a controversy of this kind. The parties must have their rights adjudicated if they cannot agree between themselves.

Here, as in the case of the Union Brewing Company, the remedy, if one exists, must be sought by complainants in their own private suit in *mandamus*, or by a proceeding in chancery for a mandatory injunction.

SPRINGFIELD, ILLINOIS, Dec. 10, 1890.

No. 8.

## UNJUST DISCRIMINATION.

## COMPLAINT.

*J. H. Linneman & Co., Complainants.*

VS.

*The Illinois Central R. R. Co., Respondent.*

## OPINION OF COMMISSION.

*Opinion by Phillips, Commissioner:*

J. H. Linneman & Co., a firm doing business at Flanagan, Livingston county, Ill., complain that the Illinois Central R. R. Co., has discriminated against them in freight charges from Chicago, in that said railroad company has, it is claimed, charged complainants more for the same class and quantity of freight from Chicago to Flanagan, than was at the same time charged for the like freight from Chicago to Minonk, Minonk being the greater distance by about 13 miles, and the Minonk shipments passing through Flanagan on the same line of road.

Minonk is a competing point, being reached from Chicago by a line of the Santa Fe road, and by two lines of the Illinois Central. One Illinois Central line reaches Chicago from Minonk by way of Mendota, running in connection with the C., B. & Q.; while the other goes by way of Kankakee and is owned continuously to Chicago by the Illinois Central Company. The Kankakee line is the one on which the town of Flanagan is situated, between Chicago and Minonk.

The Santa Fe line which passes through Minonk, reaches in its farther southward progress Pekin and Peoria, where there is water competition, and it is insisted by respondent that such water competition has resulted in compelling the Santa Fe Company to fix a rate at Minonk which is unreasonably low, the Santa Fe being unable, under the law, to make a higher rate at Minonk than its through rate. Respondent, however, shows that while its rate to Flanagan from Chicago is in fact slightly higher than to Minonk, it has not been the intention to ship any of the Minonk goods by the Kankakee line and through Flanagan; that if any such shipments were so sent, it was done inadvertently and against orders; and respondent wholly disclaims any purpose to violate the law by hauling, for less freight, a longer distance, in the same direction, over the same line.



While the proof is not specific or clear, we think it probable, that some of these shipments to Minonk were hauled through Flanagan; and this, if proved, would be a violation of the Illinois statute prohibiting unjust discrimination. Competition at a point is by our statute expressly excluded from the class of facts which our courts have said might be alleged to show a discrimination to be not "unjust." If there is competition at the end of the line, our statute gives all intermediate stations the benefit of it. In this our statute directly differs from the Inter-State Commerce act, which empowers the National Commission to allow a less charge for a greater distance where there is competition, if they deem it just and proper. This Commission is without any such power. To haul a like quantity of freight to Minonk from Chicago for a less rate than to Flanagan, a less distance, over the same line of road in the same direction, is a violation of our statute.

We do not, however, think the public good requires that respondent be prosecuted for the penalty denounced by the statute. As we before said, the proof already produced is not clear, and better and more conclusive proof would need to be found before instituting suit. The statute being penal would be strictly construed. The exact case stated in the statute would have to be proved in order to recover the penalty. We are not satisfied from the proof produced that a prosecution would succeed under the construction given this act by our courts.

*C., B. & Q. vs. People*, 77 Ill., 443.

*Kankakee Coal Co. vs. Illinois Central R. R. Co.*, 17 App. 614.

But even if specific proof were forthcoming, in view of the showing made that respondent's general freight agent had given orders to ship to Minonk only by the Mendota line, and in view of the further fact that respondent gives the Commission positive assurance that care will be taken to observe the statute in future, it is decided to institute no suit for the penalty, unless there shall be future violations.

Complainants have filed with us a bill of many items for overcharges of freights by respondent, presumably with a view to our assisting in the collection of this private bill. This we cannot do. Our function is to prosecute for fines and penalties where we believe the public welfare demands it. The courts are open to complainants for the collection of such overcharges as they can prove. The statute concerning "Extortion and Unjust Discrimination" expressly provides, (Sec. 6), that any private individual who may be damaged through a violation of the statute, as to discrimination, may recover, in a civil suit, three times the amount of all his damages, together with his reasonable counsel fees to be taxed as costs. The remedy of complainants is thus made very ample for their private injury, if they are able to show one; and this Commission is not the proper forum for that part of this complaint which embraces this private claim for damages.

SPRINGFIELD, ILLINOIS, Dec. 11, 1890.

## No 9.

RULING REGARDING PETITIONS FOR REHEARING IN  
CROSSING CASES.

In order to settle a matter of practice applicable to cases arising under the act of 1889, in regard to crossings, the following ruling is made:

The Commission are of the opinion the practice of entertaining petitions for rehearing in cases arising under said act results in delay without a corresponding advantage. It will be the purpose of the Commission to very fully hear the views of the parties in the first instance in all such cases, to the end that no hasty or ill-considered action may be taken. But in no case hereafter will any petition for rehearing in such cases be entertained unless the right to file such petition shall be expressly reserved to the parties in the decision of the Commission rendered in the case.

Adopted, July 10, 1890.

## No. 10.

# RULINGS COVERING THE INSPECTION OF GRAIN, GRAIN CONVEYORS AND SPOUTING CONNECTIONS.

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## RULE IN REGARD TO THE INSPECTION OF GRAIN.

All grain in store in any warehouse of class "A" at the time any amendment to the established rules of inspection (affecting such grain) may hereafter go into effect, shall be inspected out, in satisfaction of warehouse receipts dated prior to that time only, in accordance with the rules as they stood prior to such amendment.

Adopted May 21, 1890.

## GRAIN CONVEYORS.

*Resolved*, That in the judgment of this Commission any spouting, conveyor or other mechanical connections between any warehouse of class "A" and any other warehouse, whereby grain may be transferred from one to the other, is a violation of the statute regulating warehouses.

*Resolved*, That the Chief Grain Inspector be directed to fix a reasonable time, not to exceed thirty days from August 21, 1890, within which all such connections which may now exist shall be removed, and after the time so to be designated shall have elapsed, no grain shall be inspected by this department except the same be contained in cars, canal boats, vessels, wagons or sacks, as provided in the rules established by this Commission, or in process of transfer to the same from warehouses of class "A."

Adopted August 21, 1890.

In the matter of the application of A. E. Neely for modification of former order of Commission in regard to spouting connections and conveyors between warehouses, it is

**ORDERED**—That the rule adopted August 21, 1890, be and the same is hereby so modified, as to apply only to such spoutings, conveyors or other connections as may be used to convey or transfer grain from any other warehouse *into* a warehouse of class "A."

Adopted December 11, 1890.

## No. 11.

## INTERLOCKING, SIGNALING AND DERAILING DEVICES.

The plan and construction of interlocking, signaling and derailing devices to be used at grade crossings of intersecting lines of railroads in Illinois, must be arranged to conform to the following

## GENERAL RULES:

1. The normal position of all signals must indicate danger,—derail points open—and the interlocking so arranged that it will be impossible for operator to give conflicting signals.

2. On level track, when practicable, the derail points in high-speed tracks must be placed three hundred (300) feet from fouling point at intersection of crossing tracks.

3. On descending grades, the derail points on high-speed tracks when practicable, must be so located as to give the measure of safety equal to three hundred (300) feet on level track.

4. The minimum distance for derail points on high-speed tracks is three hundred (300) feet from fouling point at crossing, and no less distance from crossing will be approved, on account of ascending grade toward crossing.

5. On switching, storage and slow-speed tracks, the position of derail points may be located to best accommodate the traffic, and provide the same measure of safety indicated in foregoing rules.

6. On single track railroads, derail points, when practicable, should be on inside of curve, and when double track is used, the derail points should be in outside rail of both tracks.

7. Home signal posts must be fifty (50) feet beyond point of derail. Distance between home and distance signal must not be less than twelve hundred (1200) feet. Signal post should be placed on engineman's side of track it governs.

8. In case but one derail is furnished in double track crossing, where the current of traffic is in one direction, detector bars must be provided on opposite side of crossing from derails, and worked on same lever as derail, or interlocked with it, so that opposing signal cannot be given until crossing is cleared. In case trains back over crossing, after having passed over it, or if current of traffic is changed, then and in that case back-up derails must be provided.

9. Guard rail should be laid on inside of rail opposite derail, and commence at least six (6) feet toward home signal from point of derail, extending from thence toward crossing, parallel with and nine inches distant from traffic rail, total length two hundred (200) feet, unless otherwise ordered.

10. In case there are cross-overs, turn-outs, or other connecting tracks involved in the general system, the movements of cars and trains upon which present an element of danger, which danger will be enhanced by the passage of trains on main tracks over crossings without stopping, and consequently at higher speed than would be the case without the permit sought, then, and in all such cases, whether such enhanced danger be of collision between different cars or trains of the same road, or between cars or trains of different roads, it will be necessary, in addition to the protection of the main crossing, to provide by the proper devices and appliances against any such increased collateral dangers in the same complete manner that is required in the case of the main crossing.

11. Application for inspection of interlocking plant must be accompanied by plain diagram, showing location of crossing and position of all main tracks, sidings, switches, turnouts, etc. The several tracks must be indicated by letters or figures, and reference made to each, explaining the manner of its use. The rate of grade on each main track must be shown, together with numbers of signals, derails, locks, etc., corresponding to levers in tower.

It is intended in this circular to state general rules, which will govern the construction of any proposed system of interlocking. The business to be handled, relative position and operation of intersecting lines, may require safeguards not mentioned herein.

The system of derailing, signaling and interlocking must be connected and worked, and be complete in each particular before it will be approved.



## No. 12.

## INTERLOCKING, SIGNALING AND DERAILING DEVICES.

## FORM OF PERMIT.

STATE OF ILLINOIS,  
OFFICE OF THE RAILROAD AND WAREHOUSE COMMISSION,  
SPRINGFIELD.

*To all whom it may concern:*

KNOW YE, that the interlocking device, with its various parts and appliances, situated at the crossing of the tracks of the ..... Rail ..... Company, with the tracks of the ..... Rail ..... Company in ..... county, Illinois, ..... feet ..... of ..... station, having been duly inspected and examined under authority of the Railroad and Warehouse Commission of the State of Illinois, as provided by law, and having been found suitable and sufficient for the purposes of such a device, a more particular account of which device, its location and mechanical construction, will be found in the report of ..... Consulting Engineer of said Commission.

NOW, THEREFORE, it is hereby ordered, that the said interlocking device be, and the same is hereby approved, in manner and form as the same is described in said report, and shown upon the plans, diagrams and drawings thereof, now on file in the office of said Commission; and these presents shall authorize the above mentioned railroad companies, and each of them, to run said crossing without stopping, until the further order of this Commission; subject, however, to the following conditions, to-wit:

*First*—Said companies shall cause said device to be frequently inspected, and shall keep the same in first class working order, and in good repair, and shall provide for its efficient operation by a competent person or persons, so long as it shall be in use under this permit.

*Second*—Each engine and train shall be brought under control after passing distance signal, and shall proceed under control over said crossing. "Control," as here used, means speed of train must be governed by brake power at command, and in no case exceed the power of trainmen to readily stop train within safe distance should danger appear between distance signal and crossing, or at crossing.

*Third*—No change shall be made in the location of said device or any of its parts, nor in the mechanical construction thereof, nor in the manner of operating the same, without the approval of the Commission; and, in case of any such change without such approval having first been obtained, the authority hereby conferred shall at once cease.

IN WITNESS WHEREOF, the said Railroad and Warehouse Commission of the State of Illinois has caused these presents to be signed by its Chairman and attested by its Secretary this ..... day of ..... 189....

Attest:

.....

*Chairman R. R. and W. H. Com.*

.....

*Secretary.*

ADOPTED August 21, 1890.



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